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ABSTRACT

To cope with changes in the way that alcohol and drugs are used and abused, college administrations have altered their appproaches to dealing with the problem. This study surveyed 971 students, faculty, and staff members of one university to assess: the level of alcohol and drug use and abuse at the university; factors associated with substance abuse; and the level of awareness and satisfaction with prevention, educational services, and treatment programs available on campus. This final report presents findings from the study. The first two sections of the report describe and analyze the context of the university's substance abuse program. Alcohol and drug use and abuse on U.S. campuses are discussed, approaches designed to alleviate alcohol and drug problems on campus are described, and the components of the university's program are compared to those at other universities. The next section delineates basic research issues to be investigated in the study, presents a general model of alcohol use and abuse, and explores the study methodology. Results are provided in the next section. A discussion and conclusion section assesses and interprets major findings of the study, comparing some of the findings to those obtained in a national study of alcohol use and abuse at colleges in the United States. One figure, 50 tables, and the survey questionnaire are included. (NB)

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THE UNIVERSITY CHEMICAL DEPENDENCY PROJECT

Final Report — November 1, 1986

Steven A. Bloch, Ph.D.
Steven Ungerleider, Ph.D.
with the assistance of
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THE UNIVERSITY

CHEMICAL DEPENDENCY PROJECT

Final Report - November 1, 1986

Steven A. Bloch, Ph.D.
Steven Ungerleider, Ph.D.

With the assistance of:

Normandie Nunez
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1. INTRODUCTION

1.1 OVERVIEW

Over the past two decades, universities in the United States have witnessed a variety of changes in the way alcohol and drugs have been used and abused. To cope with these changes, college administrations have substantially altered the approaches they have used to deal with the problem. During the early part of the 1970's, colleges typically reacted to the rise in substance use either by ignoring abuses or cracking down on suspected alcohol or drug users. In the past ten years alternative strategies have developed, in response to evidence that chemical dependency was a lingering or growing problem. As a result, many campuses have initiated programs of varying types and intensities to reduce the demand for legal and/or illicit drugs.

While it is no longer uncommon for universities to have devised prevention, education or treatment strategies to reduce their substance abuse problems, it is still rare for programs to be formulated in a systematic manner to meet the unique needs of all major university subpopulations (students, faculty, and staff). Most typically, services are offered haphazardly with little thought to the specialized requirements of the various potential client groups, and with little effort expended to systematically follow up on these programs and evaluate their effectiveness.

The present research project was designed to assist a major University in the Northeastern portion of the United States in systematically assessing its alcohol and drug program needs. To accomplish this, an examination of many of the basic aspects of alcohol and drug use on campus was undertaken. All major University subpopulations were surveyed (students, faculty and staff) and determinations made of their: levels of substance use and abuse; knowledge, attitudes and motivations toward alcohol and drug use; perceived peer usage levels; access to alcohol and drugs; and awareness of and satisfaction with treatment, prevention and educational services on the University campus.

1.2 ORGANIZATION OF THE REPORT

This final report presents findings of the evaluation project Integrated Research Services conducted at the University. The first two sections provide a description and analysis of the context of the University's substance abuse program. First, alcohol, drug use and abuse on United States campuses are discussed, utilizing data that demonstrate the size, nature and consequences of the problem. Next, approaches designed to alleviate alcohol and drug problems on campus are described and the components of the University's program compared to those at other universities.

In the section that follows, the basic research issues to be investigated in this study are delineated, including: What are the levels of substance use and abuse at the University?; What factors are most associated with the problem?; and, What are the levels of awareness and satisfaction with available prevention, education and treatment services? A general model of alcohol use and abuse is then presented, incorporating all major variables to be examined in this study. Finally, the methodology that was used in the study, including the survey instruments and sampling procedure, is explored.

Results are provided in the next section. First, the nature of the problem at the University is examined using data that indicate both the level of use and abuse of alcohol and drugs among all major segments of the University population. Following this, some of the factors associated with the use of chemical substances are assessed. Included among these are: respondent socio-demographic status, level of personal happiness, peer pressure, knowledge of alcohol use and abuse, and substance availability on campus. Next, findings are provided regarding the adequacy of education and treatment services at the University. Lastly, a discussion and conclusion section assesses and interprets the major findings of this study, comparing some of its findings to those obtained in a national study of alcohol use and abuse at colleges in the United States.

1.3 EXECUTIVE SUMMARY

This report provides findings from the University Chemical Dependency Project. Research was conducted by Integrated Research Services and is presented in two phases. Phase I, concluded in

August, 1986, provided a preliminary report and set of findings, while Phase II includes the final manuscript.

The intent of this project has been to assess the level of alcohol and drug use and abuse at the University, the factors most associated with substance abuse, and the level of awareness and satisfaction with prevention, educational services, and treatment programs available on campus. A survey instrument was sent to a stratified sample of 1680 students, faculty and staff at the University. The 971 respondents represented an overall return rate of 58%.

Key findings from the study include the following:

- Among the total University sample who drink, 76.7% have experienced a hangover, while 64.8% have experienced nausea and vomiting at some point in their life.
- Among the total University sample who drink, 55.1% report driving after drinking, while 41.0% have driven "knowing" they had too much to drink, and 23.4% have drunk alcohol while driving.
- Surprisingly, only 0.7% of the total University sample who drink have ever been arrested for DWI.
- Undergraduates who drink report that 19.5% of them have come to class after drinking, while 24.3% have missed class because of a hangover.
- 16.5% of undergraduates who drink note that at one time in their life they have thought they might have a drinking problem.
- Among undergraduates, the proportion of students who drink heavily declines substantially as they move from their freshman to senior years.
- 13.8% of the freshmen who drink note that at one time in their life they thought they might have a drinking problem. This contrasts with 22.4% of the seniors who drink and who note that at one time in their life they thought they might have a drinking problem.

- 64.5% of undergraduates who live in fraternity and sorority houses drink in a moderately heavy to heavy manner.

- Among the total University sample, 53.3% have used marijuana or hashish at some point in their life, while cocaine use is reported by 21.6%.

- 27.2% of undergraduates report using cocaine at least once in their life, while 12.2% have used the drug in the past year.

- 39.4% of the total University sample have driven a car after using drugs.

- 12.7% of the total University sample who use drugs have thought at some point in their lifetime they might have a drug problem, while 14.8% of undergraduates who use drugs report the same perception.

- 9.1% of the freshmen who use drugs thought at least once in their life they might have a drug problem; this compares with 18.7% of seniors reporting that perception.

- Motivational factors most related to use of alcohol or drugs include: to cheer up, to forget worries and to combat boredom.

- The best predictor of level of alcohol and drug use examined in this study is peer pressure (acquaintance and close friend alcohol use). The negative response of friends to an individual's intoxication provides a significant deterrent effect on level of use.

- While men are substantially more likely than women to be involved in heavy alcohol and drug use, abstinence is nearly evenly divided between men and women (just over 7% of each group).

- While beer is the beverage of choice among most sub populations, wine emerges as the beverage of choice among faculty and staff.

- Only moderate levels of awareness exist at the University concerning where to obtain alcohol and drug treatment or informational services.

- Graduate students and faculty and staff who drink more have greater awareness of where to obtain treatment and informational services on campus than those who drink less. This result does not pertain to undergraduates.

- Those using more drugs at the University or having more problems as a result of these substances are no more likely than non-substance users to know where to receive treatment services.
- Satisfaction with treatment services provided is not high among students. Faculty and staff, however, do indicate high levels of approval of treatment services received.
- More than four-fifths of undergraduates have been furnished alcohol and drug information on campus. This contrasts with 49.4% graduate students and 31.1% of faculty and staff.
- Relatively few undergraduates at the University receive formal classroom instruction concerning alcohol and drug use and abuse. General reaction of undergraduates to the quality of classroom substance use and abuse education is quite mixed, with most students feeling that instructional quality is only "fair".
- University undergraduates refrain from alcohol to a lesser degree than do other college students. 7.2% of University students abstain vs. 15.1% for students in the northeast section of the country, and 15.1% for the nation as a whole.
- The 8% heavy alcohol use rate registered by University undergraduates is less than one-half that of undergraduates at other colleges in the northeast section of the United States or nationally.
- Among the three major subpopulations surveyed, alcohol-related problems are by far the most common among undergraduates, and are the least frequent among the faculty and staff.
- While the majority of students at the University have experienced adverse effects stemming from the use of alcohol, past year levels of abuse are substantially less than those at other colleges and universities in the northeast.

2. CONTEXT OF THE SUBSTANCE ABUSE PROGRAM

2.1 ALCOHOL AND DRUG PROBLEMS ON CAMPUS

A. Scope And Nature Of The Problem

By most standards, the magnitude of the substance use and abuse problem among youth and young adults is huge. A recent study by Engs and Hanson (1985a) concerning drinking-related problems of college students in 1983 and 1985 indicates that over 80% of all college students are drinkers, with males exceeding females by 7.5% (86.6% to 79.1%). More significant is the authors' findings that over one-fourth (25.7%) of all students may be classified as heavy drinkers (over six drinks one or more times per week at any one sitting).

Additionally, Engs and Hanson found heavy drinking to be prevalent among virtually every major category of student, whether examined by racial group, college year, region of the country, size of college or grade point average (GPA). Table 1, which examines the drinking patterns of college students in the United States in 1983 and 1985, suitably demonstrates this point: while only one subcategory (students with GPA's approximating 3.5) exists for which fewer than 20% of students are classified heavy drinkers in both 1983 and 1985, ten subcategories may be located in which at least one-fourth were found to be heavy drinkers in both years. Notably, high rates of alcohol consumption are seen among males (38.2% in 1985), whites (26.2%), freshmen and sophomores (29.0% and 31.1%, respectively), students in the Northeast (25.9%), students from smaller colleges (27.0%) and those with "C" averages or less (34.7% for a 2.0 GPA, 51.8% for those with a GPA below 2.0).

Numerous other studies support the conclusions reached by Engs and Hanson concerning the seriousness of the alcohol use problem (Harford, 1976; Engs, 1977; Milman and Su, 1973; Jessor et al., 1968; Orford et al., 1974; Bogg and Hughes, 1973). A recent investigation by Donovan and Jessor (1978) indicated that by the seventh grade, five percent of both girls and boys were already problem drinkers; this proportion increased steadily in each grade until by grade 12, it was established that almost 40% of males and 20.6% of females had problems with alcohol consumption.(1) A national survey reported by the National Institute on Alcohol Abuse and Alcoholism (Department of Health and Human Services, 1981) of men aged 21 to 59 found the highest proportion of drinking problems among the group aged 21 to 24. These studies suggest that alcohol problems begin early among the youth in the United States, increase continuously in each school year, and peak during students' collegiate and post-graduate years.

The level of use of illicit drugs among youth and young adults is also disturbingly high, exceeding in fact that of any other nation in the western industrialized world (Department of Health and Human Services, 1984). In 1960, the proportion of college-age young adults in the United States who tried marijuana stood at less than seven percent; by 1982 64% reported some lifetime use of the drug (Miller, et al., 1983). Data on the proportion of heavy cannabis users is even more striking. In its peak year, 1978, more than one in ten high school seniors used marijuana on a daily or near daily basis (Department of Health and Human Services, 1982). By 1979, regular use of marijuana by adolescents was more prevalent than that of alcohol; 7% of senior high school students were reported to be daily users of alcohol compared to 10% for marijuana (Johnston et al., 1979).

B. Consequences Of The Problem

The adverse consequences for society of widespread substance use and abuse in terms of accidents, mental and physical health, crime, suicide, work-related injuries and other problems are well documented (see for example, Department of Health and Human Services, 1982, 1983). Considering the high level of alcohol and drug consumption reported by young adults, it is not surprising that numerous alcohol and drug-related problems are registered among this group. Table 2 reports the percentage of students that drink who have encountered alcohol-related problems during the previous year. Approximately 30-31% of students in the 1974 and 1982 samples drove after drinking too much; 16-19% missed class as a result of a hangover; 6-9% damaged university property; 3-4% received a lower grade; and 2-4% had trouble with the law (Engs and Hanson, 1985b).

Although comparable data are not available concerning the adverse effects of drug abuse, evidence exists to suggest that marijuana can be responsible for "amotivational syndrome" (experienced by some users), impairment to short-term memory, slowing of one's overall learning ability, and weakening of one's immune response (and a consequent increased susceptibility to disease) (Department of Health and Human Services, 1982). A number of studies also suggest that, with the inception of marijuana use, a constellation of other behaviors is also likely to occur. Jessor and Jessor (1977) indicate that adolescents who used marijuana were much more likely than nonusers to develop a drinking problem, while Kandel (1982) points out that the extent of marijuana use is related to lower educational attainment among young adults.

2.2 APPROACHES TO UNIVERSITY ALCOHOL AND DRUG PROBLEMS

A. Approaches Used At Campuses Nationwide

Although college-age students have experienced disproportionately high levels of problems with substance abuse, universities have historically tended to avoid dealing with the problem directly. Alcohol education programs were traditionally either weak or nonexistent (BACCHUS, 1984), while "virtually nothing" was done with respect to marijuana or drug problems (Mann, 1983). As Gerardo Gonzales, founder of the college-based organization Boost Alcohol Consciousness Concerning the Health of University Students (BACCHUS), phrased it, colleges typically adopted an attitude of "benign neglect" toward drinking (Ingalls, 1982).

In recent years, this situation has changed in some significant ways as universities around the country have sought to deal more systematically with their substance abuse problems. Increasingly, education, prevention and treatment services have been offered, information about alcohol abuse has become more readily available, and various campus offices and policies have focused more directly on alcohol and drug problems.

Table 3 offers a longitudinal overview of many of the changes which occurred between 1979 and 1985. In the table, results are provided from a series of alcohol surveys of colleges and universities in the United States offering at least the BA or BS degree (Anderson and Gadaleto, 1985). Administrators at a nationally representative sample of about 200 campuses supplied information in 1979, 1982 and 1985 concerning each school's approach to alcohol-related problems. Findings indicated that significant increases occurred over the six year period (1979-1985) in programs and policies designed specifically for substance abuse on campus.

There were notable increases in the use of alcohol education and prevention projects (from 69% of schools in 1979 to 88% in 1985), group counseling services for problem drinkers (from 33% to 50%), support groups for students adversely affected by alcoholics (21% to 53%), Alcohol Education Coordinators/Specialists (14% to 48%), alcohol task forces and committees (37% to 64%), alcohol awareness focus periods (13% to 63%), and alcohol-related information/articles in campus publications (52% to 76%). Policies which have become increasingly prevalent include the requirements that alternative (non-alcoholic) beverages be provided at public functions (at 86% of campuses in 1985, compared to 54% in 1979); food be offered anytime alcohol is served (at 71% of the schools in 1985, contrasted with just 24% in 1979); and alcohol not be advertised as the primary focus of an event (at 87% of campuses in 1985, compared to 51% in 1979).

In addition to the development of new programs and policies, colleges and universities have used existing campus offices to place additional emphasis on the alcohol problem. Seventy-six percent of Residential Life offices now provide leadership with respect to alcohol education and prevention, compared to 53% in 1979, while 62% of campus Counseling Centers now focus some of their efforts specifically on the problem, compared to 44% in 1979.

A further examination of approaches that deal with college alcohol problems is supplied by Ingalls (1982). As Table 4 indicates, 68.5% of all institutions of higher education had special programs designed to educate students and 44.2% to treat them. Other common methods include employing staff to handle problems (61.9%), providing referrals to educational and/or treatment facilities (86.2%) and instituting alcohol-awareness days (45.9%). Approaches such as Alcoholics Anonymous (21.0%), Al-Anon (12.2%) and Alcohol-education courses (21.0%), however, are not heavily relied on.

Interestingly, both private and public colleges and universities in the northeast portion of the country were found to exceed the nation as a whole in the provision of alcohol services. Eighteen of twenty of the special alcohol program categories listed in Table 4 are more common in the northeast than at "all institutions" in the country.

A third examination of the types of alcohol programs available at colleges and universities in the United States is supplied by the Inter-Association Special Task Force on Alcohol Issues, a cooperative effort undertaken by BACCHUS and four other national organizations (BACCHUS, 1984). Following their examination of over 150 college and university alcohol programs in the country, the group divided the various approaches into eight categories:

1. Alcohol education programs designed to impact specifically on freshmen and/or fraternity and sorority students.
2. Strategies intended to reduce and/or prevent problems related to drinking and driving among students.
3. Alcohol education strategies used in conjunction with campus disciplinary/judiciary processes.
4. Training modules/courses designed for student personnel professionals and paraprofessionals dealing with alcohol education issues on campus.
5. Effective programs for dealing with the changes brought about on campus by legislation raising the state drinking age.
6. Strategies for implementing cooperative efforts with local beer distributors and/or advertisers to promote responsible drinking decisions among students.
7. Models of evaluation strategies designed to assess the effects of alcohol education programs on campus.
8. General alcohol education programs.

Although the Task Force report does not specify the number of programs included in each of the eight categories, it indicates that the majority were designed to accomplish one of only three goals: impact freshmen and/or fraternity/sorority students (Category 1, above); aid campus disciplinary/judicial processes (Category 3); or train student personnel professionals and paraprofessionals (Category 4). Programs found least often among those surveyed included ones designed to deal with: drinking age changes (Category 5); local beer distributors and/or advertisers (Category 6); and evaluating the effects of campus alcohol education programs (Category 7).

B. University Approach

The University being evaluated addresses its campus' alcohol and drug use concerns by utilizing a multi-modal prevention, education and treatment service delivery system designed to satisfy the varying needs of all major constituencies on campus (students, faculty, staff, fraternity/sorority members, minorities, women, athletes, etc.). To understand these programs better, the present section compares the types of policies and services employed at the University with those instituted at other colleges and universities in the United States.

With respect to the kinds of policies and services examined by Anderson and Gadaleto (1985) and presented in Table 3, the University has:

1. Required that all four alcohol policies listed be followed;
2. Provided students, faculty and/or staff with almost all specified forms of alcohol treatment listed (a crisis hotline and an off-campus drug treatment facility are exceptions); and
3. Implemented nearly all alcohol prevention and education programs listed (the use of bulletin board competitions

and radio and TV, and the provision of leadership by fraternities/sororities and the student government in alcohol efforts are exceptions).

In comparison with schools taking part in the 1982 survey of college alcohol programs completed by John Minter Associates (Ingalls, 1982), the University fares even better. All ten types of programs listed in Table 4, which provides the results of the Minter study, have been offered at the University.

Finally, an examination of the eight categories of services recommended to colleges and universities by the Inter-Association Task Force on Alcohol Issues (BACCHUS, 1984) indicates that the University provides broad-based and comprehensive chemical dependency prevention and treatment programs. At the University, special policies and/or programs have been undertaken to address the needs of freshmen and/or fraternity/sorority students; efforts were made to reduce drinking and driving among students, especially during spring break; alcohol education strategies were used in conjunction with campus disciplinary/judicial processes; training modules for student professionals and para-professionals were utilized; programs were developed to cope with changes brought on by an increase in the state's drinking age from 20 to 21; evaluations of alcohol education efforts were utilized; and general alcohol education programs were implemented. Overall, the University employed components of at least seven of the eight types of programs the Task Force has recommended.(2)

2.3 CONCLUSIONS

Two conclusions are evident from the present review of the context of substance abuse at the University. First, alcohol and drug use, abuse and their related problems are widespread in this country, especially among youth and young adults. Second, the program that the University has employed over the years to manage these problems exceeds most college and university programs in the United States in terms of its scope and comprehensiveness.

3. STUDY OF THE UNIVERSITY

3.1 OBJECTIVES

Although it has been clearly demonstrated that a substance abuse problem exists among college students in the United States and that the University has taken strong measures to deal with the matter, a number of issues need to be resolved if the University is to target its prevention, education and treatment intervention efforts in the most effective manner possible. The present study, therefore, investigates the following three major issues:

1. What are the levels of alcohol use and abuse at the University? Which groups and types of individuals on the University campus are most affected by alcohol and drug use and abuse?
2. What personal, social and environmental factors (such as individual background, peer pressure, educational capability and success, alcohol and drug availability, and personal knowledge, motivation and happiness) are most associated with substance use and abuse at the University?
3. What is the quality of alcohol and drug-related services on campus? Which groups on campus (alcohol/drug users/abusers, fraternity/sorority members, etc.) are most aware of and satisfied with existing informational educational, and treatment services?

A. General Model Of Alcohol And Drug Use On Campus

To examine the three major research issues raised above, three sets of variables have been surveyed: (1) those relating to respondent predisposition to substance use; (2) those specifying the precise levels of respondent alcohol and drug use and abuse; and (3) those measuring respondent use, awareness and satisfaction with alcohol and drug services at the University. The relationship among these sets of variables is shown in Figure 1.

According to this diagram, each factor represented may be operated on by each of the factors preceding it (i.e., to its left in the Figure). For example, level of alcohol and drug use may be viewed as the result of several types of predisposing factors: respondent background (school or work status, personal lifestyle and psychological attributes), socio-demographic status (age, sex, ethnicity, etc.) and environmental conditions (peer pressure and the availability of chemical substances). Level of substance abuse -- operationally defined as the presence of alcohol and drug-related personal problems (such as peer criticism or missing work or school) -- may be explained by the same predisposing factors as above with the addition of the explanatory variable--level of respondent alcohol and/or drug use.

Levels of awareness and use of treatment services are defined in Figure 2 as functions of the same predisposing factors as substance abuse except that measures of alcohol and drug abuse are also considered explanatory variables. Satisfaction with services is viewed as a function of the above mentioned predisposing and behavioral variables with the level of service utilization now added as an explanatory variable.

It is important to note that the conceptual framework of the present study (as outlined in Figure 1) is not intended to be inclusive of all variables researchers have used to explain substance use and abuse or service utilization. The study does not take into account such variables as family structure, home environment or the effects of television advertising. Similarly, factors which explain use and satisfaction with treatment services, such as the actual quality of care provided, are not employed in this study. (Those seeking to examine fuller models of alcohol and drug use and abuse can consult Jessor [1985], Jessor and Jessor [1977], McLaughlin et al. [1985] or the Department of Health and Human Services [1982, 1983, 1984]).

3.2 METHOD

A. Sample Selection

Equal numbers of representatives of seven different subpopulations on the University campus (freshmen, sophomores, juniors, seniors, graduate students, faculty and staff) were chosen at random from available rosters for inclusion in the present survey. In all, 1680 persons (240 from each group) were requested to take part in this study, out of approximately 8,450 members of the University community. This sampling strategy -- disproportionate stratified sampling (i.e., an equal number from each group regardless of its size) -- ensures that, in the final data, the number of persons in each subpopulation will be large enough to permit group-to-group comparisons to be made with a reasonable measure of statistical confidence.

The response rate varied by subpopulation. While 62% of undergraduates returned usable questionnaires, 55% of faculty and staff did so, and 47% of graduate students. The overall response rate was 58% (971 of 1,680 mailed surveys).

B. Procedure

Data collection began at the end of March, 1986. Questionnaires were mailed to respondents several days before their return to campus from spring break. Approximately two weeks later, all received a follow-up letter requesting that they complete their survey instrument within two weeks. About ten days after this, all 1680 respondents taking part in the study were mailed post cards thanking them for participating -- and reminding them that, if they had not completed their forms, they might still do so. A copy of the questionnaire is contained in the Appendix to this report.

A variety of measures designed to publicize the evaluation were employed. At the end of March, leaflets mentioning this study and its importance were posted in a number of locations on campus. Shortly thereafter, the University student newspaper issued both a feature article and a large advertisement concerning the study.

C. Research Ethics

Integrated Research Services, a non-profit research and education corporation, complies with standard American Psychological Association principles of ethics subject to the Department of Health and Human Services guidelines. The instrument used in the survey, much of which was adapted from Dr. Ruth Engs' Student Alcohol Questionnaire, was previously screened by the Human Subjects Review Committee at Indiana University and provided with Exemptions 3 and 4.

Several procedures have been followed to protect the anonymity and confidentiality of subjects in the present study. Neither names nor other personal codes were imprinted on any questionnaire. All subjects were assured of complete anonymity prior to filling out the questionnaire and were advised that participation in the study was voluntary.

D. Measures

Survey items employed in this study may be grouped into four sets. Each of these is discussed in turn.

-- Predisposing Factors

Six types of predisposing factors are explored in the survey questionnaire (see Appendix). Background items (Sections A and H) are concerned with respondent socio-demographic status (age, sex, religion, etc.), school or work status (major/concentration, grades, year in school, general intelligence [measured by one's SAT score], etc. for students; job title and number of years employed for faculty and staff), housing arrangements and fraternity/sorority membership (students only).

Alcohol knowledge items (Section F), the second predisposing factor, examine how aware respondents are of basic information regarding alcohol. Ten items derived from Engs' Student Alcohol Questionnaire inquire into issues such as whether alcohol functions as a stimulant and how quickly drinks of liquor are eliminated by the body. A total score was derived by determining the number of responses answered correctly.

Peer usage levels, peer social pressure to drink and peer attitude toward respondent abuse (Section C, Questions 1-4) make up the third predisposing factor, while availability of alcohol and drugs on campus (Section C, Questions 5-6) constitutes the fourth. The fifth factor (Section B, Question 10) asks respondents to indicate the kinds of circumstances (motivating factors) that cause them to drink: "to forget worries, to cheer up, to be polite," etc., while the sixth factor examines respondent happiness over the past year.

-- Alcohol And Drug Use And Abuse

Questions regarding the level of respondent alcohol use (Section B, Questions 1-6) were adapted from Engs' Student Alcohol Questionnaire. Individuals were queried about both the frequency and quantity of their consumption of beer, wine and liquor. Calculation of a quantity-frequency index (Q-F), as revised by Engs (Engs, 1977; Engs and Hanson, 1985b), was made to determine drinker classifications. From the beverage (beer, wine or distilled spirits) most frequently used and the amount consumed on a typical occasion, a Q-F level was calculated for each subject, who was placed in one of six categories: abstainer, drinking less than once a year or not at all; infrequent drinker, drinking at least once a year but less than once a month; light drinker, drinking at least once a month but not more than 1 to 2 drinks at any one sitting; moderate drinker, drinking at least once a month, 3 to 4 drinks per occasion, or at least once a week with no more than 1 to 2 drinks at any one sitting; moderately--heavy drinker, drinking 3 to 4 drinks at least once a week or drinking 5 or more drinks at least once a month; heavy drinker, drinking 5 or more drinks more than once a week.

Questions about respondent drug use covered only the frequency, not quantity, of use, since street drugs vary a great deal in their potency. Available quantity-frequency scales are far less reliable indicators of drug intoxication than they are for alcohol. Questions asked related to use of marijuana or hashish (Section B, Question 7), cocaine (Section B, Question 8) and all other drugs (Section B, Question 9). Because only the frequency of drug use has been obtained, not quantity, a true set of drug classifications based on the Q-F scale could not be devised. Levels of drug use for marijuana (or hashish), cocaine and other drugs were set as follows: heavy use included those using every day; moderately-heavy use, at least once a week but not every day; moderate use, at least once a month but less than once a week; light use, more than once a year but less than once a month; infrequent use, once a year or less; and abstainer, never used. An overall index of drug use was developed by selecting the level of the substance used most frequently.

-- A Note on Validity

A question which naturally arises when sensitive behaviors such as alcohol and drug use are measured concerns whether honest results can reasonably be expected from a self-administered questionnaire. This question has come under increasing scrutiny in recent years and, while concerns are expressed about the adequacy of available measures (Armor et al., 1978; Rouse et al., 1985), the preponderance of studies report that self-report alcohol and drug use measures stand up well to tests of their reliability and validity (Engs, 1977; Johnson and O'Malley, 1985; Johnston, et al., 1986; O'Malley, 1986; Williams et al., 1985). Clearly, while prior validation of measures does not guarantee the adequacy of the findings obtained in this study, it does suggest that any problem with validity is not likely to be the fault of the quantity and frequency of use measures employed here.

-- Problems And Consequences Of Substance Abuse

Measures of the negative consequences of alcohol abuse (Section D, Questions 1-17) were adapted from Engs' Student Alcohol Questionnaire. Items concerned the number of times respondents encountered problems (hangovers, criticism, arrests, etc.) as a result of their drinking. A similar set of items was developed for this present study regarding the consequences of drug abuse (Section D, Questions 1-12).

-- Awareness, Use And Satisfaction With Alcohol Services

Awareness of alcohol-related services at the University (Section G, Questions 1-3, 5, 7) was measured by asking respondents: (1) if they know where at the University to go to receive information and treatment concerning alcohol and drug use and abuse; (2) if they are aware of the University's program in alcohol and drug use and abuse; and (3) whether they have ever received information on alcohol and/or drug use and abuse either inside or outside class. Measures of respondent satisfaction with services received (Section G, Questions 4, 6 and 8) related to how pleased individuals have been with treatment, education and general information they received while at the University.

4. RESULTS

4.1 SOCIO-DEMOGRAPHIC AND BACKGROUND CHARACTERISTICS AMONG UNDERGRADUATES AND THE UNIVERSITY COMMUNITY AS A WHOLE

The sample of respondents at the University contains 971 individuals, including 599 undergraduates, 113 graduate students and 263 faculty and staff.(4) As Table 5 indicates, 52.1% of the total sample are male and 47.9% are female; 82.7% are White, while 4.7% are Black, 2.6% Hispanic, and 5.1% Asian American. 30.7% of respondents were raised in a Protestant faith where drinking was permitted, while 2.9% were brought up Protestant where drinking was not allowed; 26.2% were raised Catholic, 19.2% Jewish, and 17.0% were raised without a religious persuasion. 37.6% of the University community considers religion to be either moderately or very important to them, while 62.4% consider it either mildly important or not at all important.

Of the undergraduate population sampled, 48.1% are male and 51.9% female; 81.0% are White; and 15.9% are either Black, Hispanic or Asian American. 25.5% were raised in a Protestant faith where drinking was permitted, while 1.7% came from Protestant backgrounds that did not allow drinking; 24.3% were Catholic, 23.6% were Jewish, and 21.2% were raised without a formal religion. 37.7% consider religion either moderately or very important, while 62.4% considered it only mildly important or not at all important.

Each of the four grade levels make up approximately one-fourth of the overall undergraduate sample, freshman constituting

25.5%, sophomores 24.9%, juniors 21.2% and seniors 28.4%. Over one-third (34.7%) of respondents are arts or humanities majors, while 29.5% have their major concentration in science or engineering, and 23.5% in the social sciences. Most students (96.3%) are in good academic standing; just 22 individuals (3.7%) report a non-favorable standing with the University.

The majority of undergraduates (68.3%) live in campus housing, only 26.0% living off-campus. And, while 12.9% of students indicate membership in a fraternal organization, fewer than one-half of these individuals reside in fraternity or sorority houses.

4.2 NATURE OF THE PROBLEM: ALCOHOL AND DRUG USE AND ABUSE AMONG UNDERGRADUATES AND THE UNIVERSITY COMMUNITY AS A WHOLE

A. Quantity And Frequency Of Drinking

As Table 6 demonstrates, most members of the University community consume alcoholic beverages on a fairly regular basis. Only 21.0% drink beer only once a year or less, while 15.7% consume wine that infrequently, and 19.2% use spirits that rarely. As Table 7 indicates, these percentages differ only marginally from rates obtained for undergraduates.

Tables 8 and 9 provide data on quantity-frequency (Q-F) of drinking for beer, wine, spirits and alcoholic beverages as a whole. As Table 8 demonstrates, only 6.2% of those in the overall University community may be considered "abstainers" from alcohol (that is, drinking once a year or less or not at all), while 12.4% are infrequent drinkers. For the undergraduate population (Table 9), 7.2% are abstainers and 12.9% infrequent drinkers.

When drinking is analyzed by type of beverage consumed, beer appears to be not only the most popular, but also the beverage most likely to be consumed by heavy drinkers. Among under graduates, only 34.9% are abstainers or infrequent drinkers of beer, while 42.4% and 42.7%, respectively, drink wine and spirits in this limited manner. Among those in the entire University community, 38.8% are abstainers or infrequent drinkers of beer, while 44.2% and 48.0% drink wine and spirits that lightly.

While abstinence or light consumption of beer is somewhat less common than for wine and spirits, heavy consumption occurs decidedly more frequently. Among undergraduates, heavy drinking was reported by 7.4% of those consuming beer, but only 0.5% of those consuming wine and 1.2% of those consuming spirits. Among the overall University populace, the preference for beer was almost as marked as among undergraduates: 5.1% indicated heavy use of beer, but only 0.4% and 0.7% did likewise with respect to wine and spirits.

B. Problems Resulting From Drinking

As documented in Table 10, most respondents who drink report some adverse results stemming from it during the course of their lives. Among those in the overall University sample a substantial majority of drinkers have experienced a hangover, or nausea and vomiting at some point (76.7% and 64.8%, respectively). 55.1% reported driving after drinking, 41.0% driving after having too much to drink, and 23.4% driving while drinking. (Interestingly, only 0.7% of the total sample have ever been arrested for DWI.) Findings with respect to alcohol's role in sexual activity were especially significant. As a result of their alcohol consumption, 44.0% of respondents indicate that they were sexually active when they otherwise might not have been, while 20.7% engaged in unprotected intercourse.

Two measures shown in Table 10 should be specially noted because they offer an indication of the size of the group most troubled by alcohol. 13.3% of the sample were criticized by their peers at some time during their lifetime as a result of drinking, while 16.6% thought they might have a problem with alcohol at one time or other. Over the past year, 5.2% were criticized at least once, while 6.8% thought they might have a problem with alcohol.

Among the undergraduate subpopulation, 73.8% (Table 11) report having had a hangover at least once in their lifetime, while 65.1% experienced nausea and vomiting as a result of drinking. 47.5% of undergraduates indicated that they have driven after drinking at some point in the past, while 34.8% note driving after knowing they have had too much to drink, and 24.0% mention driving while drinking. As with the overall University populace, few individuals (.8%) have ever been arrested for DWI. It is interesting that only 19.5% report coming to class after drinking, while nearly one-fourth (24.3%) have missed class because of a hangover; 6.3% and 14.5% of undergraduates have encountered these problems in just the past year. 46.5% reported being sexually active after drinking when they might not have so desired, while 21.2% engaged in unprotected intercourse at least once during their lifetime.

Significantly, 12.3% of undergraduates were criticized at least once in their lifetime because of drinking, while 16.5% thought they might have a drinking problem. Within the past year alone, 6.3% undergraduates have been criticized for their drinking, while 7.2% thought they might have a problem with their alcohol consumption. Alcohol-related problems, as they affect the freshman, sophomore, junior and senior subpopulations, are noted in Tables 12 through 15. One of the most significant findings provided in these tables is that, while 14.9% of freshmen thought they might have had a problem with drinking at some point in their life, 22.8% of seniors have believed this.

C. Socio-Demographic And Background Differentials

-- Sex

While drinking at the University is widespread, heavy drinking is largely a male-dominated activity. As shown in Table 17, about three and one-half times as many men (8.3%) as women (2.4%) are heavy drinkers in the total sample. This compares (Table 16) with men being more than four times as likely as women in the undergraduate population to drink heavily (13.2% versus 3.2%). Similarly, males are significantly more likely to be moderately heavy drinkers when compared to women: 29.6% of the total male population compared to 16.7% of the female sample. For undergraduates, comparable figures were 21.9% for males and 14.4%

for females.

Interestingly, while these data demonstrate that heavy or moderately-heavy consumption of alcohol is largely a male activity, abstinence can not be regarded as just female-based. As Tables 16 and 17 demonstrate, approximately equal percentages of females and males abstain from alcohol in the total campus and undergraduate populations.

-- Race

Significant differences exist in the drinking patterns of Whites and non-Whites at the University. As Tables 16 and 17 demonstrate, light to moderately heavy drinking is clearly the norm among Whites; 75.7% of undergraduates and 79.7% of those in the overall University community drink in this manner. Among non-Whites, however, this type of alcohol consumption is far less common; 53.6% of undergraduates and 56.6% of those at the University generally consume alcohol lightly or to a moderately heavy degree. But, while only 15.8% of White undergraduates abstain or drink only infrequently, 40.2% of non-Whites do so; and, while just 14.5% of Whites at the University abstain or drink infrequently, 37.9% of non-Whites do so.

-- College Class

When drinking patterns for the four undergraduate classes at the University are analyzed, two important trends emerge. First, the proportion of students who abstain from drinking or who drink only infrequently tends to decline with class year. While 26.8% of freshmen abstain or drink infrequently, only 16.5% of seniors drink in such a manner.

Second, the proportion of students who drink heavily declines substantially as they move from freshmen to senior year. While 13.7% of those in their first year consume alcohol heavily, only 9.4% of sophomores, 4.7% of juniors and 4.1% of seniors do so.

As a whole, socialization of undergraduates into drinking in a moderated manner appears to occur at the University as students move through their four year college career. As a result of this process, nearly three in five graduating seniors (58.6%) identify themselves as either light or moderate drinkers compared to just one in three (35.9%) freshmen.

-- Religion

Two findings are most evident when the effects of religious persuasion on drinking level are analyzed. First, those raised as Catholics are significantly more likely to drink heavily compared to those in other religions. Among undergraduates, 13.2% are identifiable as heavy drinkers, while among those in the overall University community, 8.8% may be so classified. These figures far exceed the proportion drinking heavily in any other religious persuasion among the undergraduate and total University samples.

Second, those with Jewish backgrounds are the most likely to be temperate drinkers; that is, they are more likely neither to drink heavily nor to abstain from alcohol altogether. Overall, 76.7% of those from Jewish backgrounds at the University may be classified as either infrequent, light or moderate drinkers compared to 69.5% of Protestants, 65.6% of Catholics and 66.1% of those raised without a formal religion.

As indicated in Tables 16 and 17, the importance attached to religion by those at the University affects their level of consumption. Surprisingly, the effect is not consistent across Q-F levels. That is, while those with very strong beliefs tend to be disproportionately more likely to abstain from alcohol use and to use alcohol infrequently, they are no less likely than those less religious to use alcohol extensively. Among undergraduates, 42.6% of those describing themselves as very religious abstain or drink alcohol infrequently; this contrasts sharply with 16.1% drinking that temperately among the non-religious. But, while religion strongly affects levels of low use, Table 16 documents that highly and moderately religious students are just as likely as those less observant to drink heavily; 7.9% of the very religious are heavy drinkers compared to 7.1% of the non-religious.

-- Fraternity/Sorority Membership

Members of fraternities and sororities are disproportionately involved in alcohol and drug consumption. As revealed in Table 16, members are significantly more likely than non-members to consume alcohol heavily or moderately heavily. Nearly one-half (49.4%) of those in fraternities and sororities drink in this manner, while only slightly more than one-fourth (28.3%) of other undergraduates consume alcohol to this degree.

It is also significant that, while it is common for those who are not members of fraternal organizations to drink in a fairly temperate manner, this is fairly uncommon among members. While 45.5% of non-members of these associations abstain from alcohol or drink infrequently or lightly, only 16.9% of fraternity and sorority members do so.

-- Form of Housing

The form of housing in which a student resides plays an important role in determining his or her drinking level. More than one-fourth of those living in on-campus housing either abstain or drink only infrequently. This contrasts with just 10.1% of those residing off-campus and 0.0% of those dwelling in a fraternity or sorority house.

Housing type is not just a significant determinant of whether a student will drink temperately, it is also an excellent determinant of whether he or she will consume alcohol in a heavy or moderately-heavy manner. While 8.6% and 3.8% of students living on- and off-campus, respectively, drink heavily, 22.6% of those residing in fraternity or sorority houses do so. Similarly, while 19.6% and 27.8% of those living on- and off-campus, respectively, consume alcohol to a moderately great degree, 41.9% of fraternity/sorority residents do so. Overall, therefore, 64.5% of those who live in fraternity and sorority houses indicate also heavy or moderately heavy consumption of alcohol. It is worth noting that those living in fraternities and sororities drink even more heavily than non-resident members. While 49.4% of members of fraternal organizations were shown to drink heavily or moderately-heavily, 64.5% of those living in this form of housing do so.

-- Major Concentration

No statistically significant differences have been found in the drinking patterns of those in the various academic disciplines. Perhaps the most notable of the minor differences detected (Table 16) is that science and engineering students are somewhat more likely than those in other disciplines to abstain completely from alcohol.

-- Academic Standing

Differences in drinking patterns between students in "good" academic standing and those who are not do not reach statistical significance. Because this may only be due to the relatively small size of the sample of those not in good standing (N=22), it is worth exploring the major differences between these two groups further.

As Table 16 indicates, those in good academic standing are substantially more likely to be temperate drinkers than those who are not in good standing. 42.5% of the former group either abstain, drink infrequently or lightly; in contrast, just 22.7% of those in the latter group drink as temperately. The difference between the two groups with regard to the proportions drinking heavy or moderately heavily are not nearly as substantial. 8.0% of those in good standing drink heavily, while 22.6% drink moderately heavily; meanwhile, 9.1% of those not in good standing drink heavily, while 31.8% drink in a moderately heavy manner.

D. Frequency Of Drug Use

Among those in the total University population, marijuana and hashish are by far the most frequently used drugs (Table 18). Overall, 53.4% report smoking these substances during their life time, while 26.4% tried them in the past year. A significantly lower proportion experimented with cocaine; just 21.6% of those at the University ever used the drug, while only 8.6% report trying it in the past year. Use of "other" drugs appears less common than that of cocaine; just 17.8% report experimenting with any other type of substance, while only 6.8% used these chemicals in the past year.

As noted in Table 19, undergraduates report drug usage levels that were somewhat higher than the overall University population. 59.7% of undergraduates indicate using marijuana or hashish during their lifetime, while 36.0% report trying it at least once in the past year. Cocaine use is reported by 27.3% of students over the course of their lifetime, while 12.2% have taken it in the past year. Lifetime and past year use of other drugs have been reported to be 19.8% and 8.9%, respectively.

Regular heavy use of drugs does not appear to be a particularly common phenomenon at the University. Just 1.2% of undergraduates use marijuana or hashish every day, while only 5.0% smoke it once per week or more.

E. Problems Resulting From Drug Use

Many of those who used drugs have encountered problems during their lifetime. As Table 20 documents, 39.4% of the total

University sample who used substances report driving a car after using while 21.2% indicate they drove while taking drugs. Despite the relatively high level of these activities, only 0.4% reveal that they have ever been arrested for driving while intoxicated with drugs (DWID).

18.2% of those who used drugs have been criticized for their use at least once in their lifetime, while 8.3% encountered this criticism in the past year. 12.7% report believing they might have a drug problem, while 5.1% indicate this concern arose at least once in the past year.

Comparable data for the undergraduate sample are reported in Table 21. 38.3% of this group note having driven a car after using drugs at some point in their life, while 20.8% have done so in the past year; 20.7% report taking drugs while driving, while 12.5% have done this in the past year. Only 0.3% were ever arrested for any of these activities. 28.2% of undergraduates who use drugs went to class or work after taking chemical substances while 13.1% state that this occurred in the past year. 10.4% note having missed a class because of drug use.

At some point in their lifetime, 19.9% of undergraduates who use drugs at the University have been criticized for it, 10.7% reporting that this occurred in the past year. Similarly, 14.8% thought they might have a drug problem, 6.8% believing this in the past year.

Data concerning drug use/abuse-related problems for freshmen, sophomores, juniors and seniors who use drugs are provided in

Tables 22 through 25. An interesting finding, evident in these tables, concerns the increased belief of seniors (compared to freshmen) that they might have a substance abuse problem. While 3.0% of freshmen report in the past year they might have had a drug problem, nearly three times that number of seniors (9.3%) indicate a similar perception; 9.1% of freshmen report thinking they might have had a problem with drugs over their lifetime, while 18.7% of seniors have believed this at some point.

F. Socio-Demographic And Background Differentials

--Sex

As shown in Tables 26 and 27, heavy drug use, like heavy alcohol use, is largely a male phenomenon. While 2.2% of men in the full University sample use drugs every day, 0.0% of women do. (In other words, out of 464 women sampled, not one reports daily drug use.) And, while 10.8% of undergraduate men use drugs once per week or more (and are classified as moderately heavy or heavy users), only 2.6% of women do so.

-- Race

Among the total sample of Whites at the University, 0.9% report being heavy drug users compared to 2.4% of non-Whites. By comparison, no significant difference between Whites and non-Whites has been indicated among the moderately-heavy to heavy drug users in the undergraduate sample; each group reports a little more than 6% of their members falling into the moderately-heavy to heavy categories.

-- College Class

There is an extremely significant difference in the drug taking behavior of the four classes at the University. As noted in Table 27, 29.6% of freshmen may be classified as light to heavy drug users (i.e., using more than once a year). This number increases sharply for sophomores, juniors and seniors; these groups report more than once-per-year use by 44.3 %, 40.1% and 40.3% of their members, respectively. Significantly, moderately--heavy to heavy drug use among undergraduates is also substantially higher among upperclassmen than among those in the lower class levels. While only 3.9% of freshmen report heavy (daily) use of drugs, 6.0% of sophomores, 9.4% of juniors and 7.1% of seniors do so.

A review of earlier tables regarding alcohol use (Tables 16 and 17) and present tables concerning drug use suggests the following conclusion: while heavy alcohol use is more common among freshmen and sophomores, heavy drug use is not; conversely, while upperclassmen use drugs to a greater degree than their lower class level counterparts, their level of heavy alcohol use tends to be comparatively low. This relationship suggests that when younger students enter the University, their drug of choice is alcohol. Perhaps conditioning from home or preparatory high schools sets the tone for their greater use of alcohol as opposed to drugs. As students proceed through college, their preference changes -- heavy drug use increases and heavy alcohol use declines.

-- Religion

Tables 26 and 27 indicate that those raised with non-religious or Jewish backgrounds are more likely to have disproportionate numbers of moderately heavy to heavy drug users. Among the complete University sample, 8.1% of those with non-religious backgrounds and 7.7% of Jews are heavy or moderately heavy drug users. This compares to 3.6% of Catholics and 3.4% of Protestants using drugs heavily (Table 26). Among undergraduates, 10.4% of those from non-religious backgrounds are moderately heavy or heavy users, compared to 9.4% of Jews, 5.0% of Protestants, and 2.8% of Catholics.

Among the total University population who felt religion was not important (Table 26), a significantly higher percentage (33.5%) use drugs more than once a year compared to those for whom religion was very important (16.9%). Table 27 notes that among undergraduates who feel religion is not important, 46.0% use drugs more than once a year; this compares to 23.7% who use drugs in this manner among those who are very religious. 5.9% of those who feel religion is very important were moderately heavy or heavy drug users, while 9.5% of those who consider religion to be unimportant report similar moderately heavy to heavy drug use.

-- Fraternity/Sorority Membership

Substantially higher levels of drug use are detected among undergraduates who are members of fraternities and sororities than among those who are not. As Table 27 indicates, 13.2% of members use chemical substances in a moderately heavy-to-heavy manner compared to 5.6% of those who are not members. Meanwhile, 41.3% of non-members abstain completely from drug use compared to 24.7% of fraternity and sorority members.

-- Form of Housing

Significant differences exist in the drug use levels of undergraduates depending upon their housing arrangements. Most notably, those living off-campus are most likely to use chemical substances either heavily or moderately heavily, while those residing on-campus are least likely to do so. As Table 27 indicates, nearly four times as many students living off-campus use drugs either heavily or moderately heavily, while just 3.4% of those on-campus do so. Meanwhile, 47.8% of those on-campus abstain from drug use entirely, compared to only 20.9% of those off-campus.

Although drug use is not uncommon in fraternities and sororities, it is far less widespread than alcohol consumption. Table 16 demonstrated that 64.5% of fraternity and sorority residents use alcohol either moderately or moderately heavily; by contrast, Table 27 indicates moderate-to-heavy use of drugs exists among substantially fewer (22.6%) of those living in fraternal houses.

-- Major/Concentration

Alcohol consumption levels of those in differing academic disciplines were not determined to be significantly different from each other (Table 16); such is not the case for drug use (Table 27). Science and engineering students show a decided preference for abstaining from drug use. 52.0% abstain, compared to only about 32-35% of arts and humanities and social science majors. Meanwhile, 9.2% of those with concentrations in arts and humanities use chemical substances either heavily or moderately heavily compared to 4.3% of those in the social sciences and 5.6% in science and engineering.

-- Academic Standing

No significant differences in drug use are revealed in Table 27 between those in good academic standing and those who are not.

4.3 SOCIO-DEMOGRAPHIC AND BACKGROUND CHARACTERISTICS OF FACULTY & STAFF AND GRADUATE STUDENTS

The sample of faculty and staff respondents at the University contains 263 individuals. 59.4% of the faculty and staff sample are male and 40.6% are female; 92.7% are White, while 3.5% are Black; 1.4% are Hispanic, and 0.8% are Asian American. 42.5% of respondents were raised in a Protestant faith where drinking was permitted, while 4.6% were brought up Protestant where drinking was not allowed; 28.2% were raised Catholic, 14.3% Jewish and 6.9% brought up without a religious persuasion. 36.2% of the faculty and staff consider religion to be either moderately or very important to them, while 63.8% consider it either mildly important or not at all important. 19.2% of faculty and staff are single, 63.6% are married, 3.1% are separated and 8.4% are divorced.

Of the 113 graduate students sampled, 57.5% are male and 42.5% are female; 68.8% are White; and 2.7% are Black, 4.5% are

Hispanic and 1.8% are Asian American. 29.7% were raised in a Protestant faith where drinking was permitted, while 5.4% are from Protestant backgrounds that did not allow drinking; 31.5% are Catholic, 7.2% are Jewish, and 18.0% have been raised without a formal religion. 41.1% consider religion either moderately or very important, while 58.9% consider it only mildly important or not at all important.

About one-quarter (24.8%) of graduate respondents are arts or humanities majors, while 45.1% concentrate on science and 7.1% on engineering, and 19.5% on the social sciences. All graduate students (100%) are in good academic standing.

The majority of graduates (88.5%) live in off-campus housing, only 9.7% living on-campus. 97.3% of graduate students indicate no membership in a fraternal organization. 61.9% of graduates are single, 30.1% married, 0.9% separated, and 2.7% divorced.

4.4 NATURE OF THE PROBLEM: ALCOHOL AND DRUG USE AND ABUSE AMONG THE FACULTY AND STAFF AND GRADUATE STUDENTS AT THE UNIVERSITY.

A. Quantity and Frequency of Drinking.

A large majority of faculty and staff at the University consume alcoholic beverages on a regular basis. As Table 29 demonstrates, only 22.9% drink beer only once a year or less, while 10.1% consume wine that infrequently and 22.1% use spirits that rarely. As Table 31 indicates, these percentages differ only slightly from rates obtained for graduate students.

It is notable that 10.1% of faculty and staff drink wine on a daily basis, while 5.0% consume beer and 5.0% drink spirits that frequently. Although this frequency of consumption exceeds by about two to four times that for the University community as a whole, it should be pointed out that fewer than 20% of these individuals consume more than two drinks at an average setting.

Tables 31 and 32 provide data on Quantity Frequency (Q-F) of use for beer, wine, spirits, and alcoholic beverages as a whole. As Table 31 demonstrates, only 3.9% of those in the faculty and staff are abstainers from alcohol (that is, drinking once a year or less, or not at all), while 11.6% are infrequent drinkers. For the graduate population (Table 32), 6.2% are abstainers and 11.5% infrequent drinkers.

Beverage choice and consumption patterns are significantly different among the faculty and staff compared to what has been reported for the undergraduates and overall population. Contrary to previous findings, when drinking is analyzed by type of beverage consumed, wine, not beer, appears to be the most popular. As Table 31 demonstrates, only 29.1% of the faculty and staff are abstainers or infrequent drinkers of wine compared to 49.3% and 53.9%, respectively, for beer and spirits. Among the faculty and staff, moderate to heavy drinking is reported by 39.9% of those consuming wine, but only 31.0% of those consuming beer and 24.0% of those consuming spirits.

Among the graduate student population, the general preference is for beer over wine. 11.5% indicate moderately heavy to heavy use of beer, but only 3.6% and 0.9% exhibit such high use of wine and spirits. Among those in the graduate population, 35.4% are abstainers or infrequent drinkers of beer and wine, while 62.8% drink spirits that lightly.

B. Problems Resulting from Drinking

As documented in Table 33, most respondents who drink report some adverse results stemming from it. Among those in the faculty and staff, 33.1% experienced a hangover while 8.2% felt nausea and vomiting in the past year. These are substantially lower percentages than those for the undergraduate population (57.5% and 29.6%, respectively). Among the other problems reported in Table 33, 4.9% of faculty and staff report driving while drinking, compared to 10.3% of undergraduates. With respect to alcohol's role in sexual activity, some significant findings emerged. As a result of their alcohol consumption, 5.7% of faculty and staff indicate having been sexually active when they might have not been during the past year. This compares to 24.4% of undergraduates (see, Table 11) during the same time period. Also as a result of their alcohol consumption, 2.9% of faculty and staff report having engaged in unprotected intercourse which compares to 8.9% of undergraduates.

Some noteworthy findings about graduate students are shown in Table 34. Only one-half as many graduates as undergraduates experienced nausea and vomiting in the past year (29.6% vs. 14.2%). Slightly more than one-half as many graduates (5.6%) as undergraduates (10.3%) report drinking while driving and less than one-third as many graduates (1.9%) as undergraduates (6.1%) report coming to class after drinking. 9.4% of graduates report being sexually active after drinking, while 3.8% engaged in unprotected intercourse. This compares with 23.4% and 8.2% of undergraduates being involved in these activities.

One of the more significant findings provided in Tables 33 and 34 is that, while 16.3% of the faculty and staff believe they might have a problem with drinking at some point in their lifetime, 17.9% of graduate students report this. This compares with a very similar percentage (16.5%) of undergraduates who perceive alcohol to have been a problem for them at some point.

C. Socio-Demographic and Background Differentials

-- Sex

While heavy drinking among undergraduates and graduates is a largely male dominated activity, this is not the case for faculty and staff at the University. 11.3% of men and 11.4% of women faculty and staff report moderate to heavy drinking (Table 35). This is a departure from earlier findings indicating that, for undergraduates, men are about four times more likely than women to drink heavily.

Among graduate students, men are again far more likely to use alcohol heavily. 18.5% of males, compared to only 8.3% of females can be classified as moderately heavy or heavy drinkers.

-- Race

Some significant differences exist in the drinking patterns of Whites and non-Whites among the faculty and staff and graduate students. As Tables 35 and 36 demonstrate, light to moderate drinking is clearly the norm among Whites: three-quarters of the faculty and staff (75.0%) and graduate students (75.4%) drink in this manner.

Among non-Whites, however, light to moderate alcohol consumption is far less common, and complete abstention and infrequent drinking is far more widespread. Only about one-half of the non-White faculty and staff (52.6%) and graduate students (54.2%) consume alcohol lightly or moderately. But, while only 13.6% of White faculty and staff abstain or drink infrequently, 36.8% of non-Whites do so. And, while just 10.4% of Whites at the graduate level abstain or drink infrequently, 31.4% of non-Whites do so.

-- Religion

Findings concerning the effects of religious persuasion on drinking level are, in general, consistent with results reported for undergraduates and the overall University community. (Because results for the graduate sample are not statistically significant, they can only be used in a suggestive, not definitive manner). Among the faculty and staff and graduate students, those raised as Catholics are more likely to drink in a moderately heavy to heavy manner than those in other religions.

Among the faculty and staff, for example, 16.7% of Catholics are identifiable as moderately-heavy to heavy drinkers, while among those with Jewish backgrounds, only 5.6% drank this heavily. These figures compare with 10.7% of Protestant faculty and staff drinking in a moderately-heavy to heavy manner and with 11.8% of those from non-religious backgrounds.

A second similarity to earlier findings is those that with Jewish backgrounds are not only less likely to drink heavily than those from other religions, but also less likely to abstain completely from alcohol or to drink only infrequently. For example, while 23.5% of faculty with non-religious backgrounds abstain or drink infrequently, 15.3% of Catholics do so, 14.9% of Protestants and just 11.1% of Jews.

It is worth noting that findings for graduate students largely support those concerning the faculty and staff. The major difference is that the data about drinking patterns of those with Jewish backgrounds are of limited significance, because of the small size of the Jewish graduate school sample (N=8).

Although the importance of religion to respondents has not been found to play a strong role in determining alcohol use among either the faculty and staff or graduate student population, one finding does stand out. While those who consider religion to be very important are less likely to use alcohol moderately heavily or heavily among graduate students, they are more likely to use it this way among the faculty and staff. The relatively small size of the graduate sample may make this finding questionable.

D. Frequency of Drug Use

Among faculty and staff, marijuana and hashish are by far the most frequently used drugs (Table 37). Overall, 39.5% report smoking these substances at least once while 8.9% use them more than once a year. A significantly smaller proportion of the faculty and staff have experimented with cocaine; just 8.1% have ever tried the substance, while only 1.9% report using it more than once a year. Use of "other drugs" is slightly more common than that of cocaine. 12.7% report having experimented with another type of substance, although only 3.1% use these chemicals more than once a year.

Graduate students report drug usage levels that are somewhat higher than those for either the overall University population or the faculty and staff. Regular use levels (more than once per year) are still far lower than those reported (Section 4.2) for the undergraduate subpopulation. 52.2% indicate having tried marijuana or hashish during their lifetime, while 15.9% report trying it more than once a year. Cocaine has been used by 23.0% of graduate students, 5.3% taking it more than once a year. Use of other drugs is reported by 18.6% of graduate students.

Regular heavy use of drugs is clearly not a widespread problem among either the faculty and staff or graduate students at the University. Just 0.9% of graduates use any kind of drug on a daily basis while only 3.5% use some kind of substance once per week or more. Among the faculty and staff, just 0.4% and 1.6% use drugs once a day and once a week, respectively.

E. Problems Resulting from Drug Use

The percentage of faculty and staff members who used drugs and encountered problems is substantially less than that discovered for graduate or undergraduate students. Nevertheless, some of the findings relating to faculty and staff are worthy of concern. As Table 39 documents, 38.1% of faculty and staff who used drugs report having driven a car after using at some point in their lifetime, while 18.1% report having driven while taking drugs. Despite the relatively high level of these activities, no faculty or staff member has ever been arrested for Driving While Intoxicated by Drugs (DWID drugs). 12.4% of faculty and staff who used chemical substances were criticized for their drug use at least once, while 2.9% encountered this criticism in the past year. 4.8% of faculty and staff who tried drugs report believing they might have had a problem with its use, while 0.1% indicate this concern has arisen at least once in the past year.

Drug use among graduate students is reported in Table 40. 49.1% of this group (who have taken drugs) note having driven a car after using these substances at some point in their lifetime, while 11.3% have done so in the past year. 30.2% of this group report taking drugs while driving, while 11.3% have done this in the past year. Again, no graduate student has ever been arrested for any of these activities. 24.5% of graduate students went to class or work after taking drugs, 9.4% stating this occurred in the past year.

At some point in their lifetime 18.9% of graduates at the University who used drugs were criticized for their use. Similarly, 13.2% of this group thought they might have a drug problem, 1.9% believing this in the past year. By comparison, 14.8% of undergraduates who experimented with drugs report having thought they might have a drug problem (at some point in their lifetime), 6.8% believing this in the past year.

F. Socio-Demographic and Background Differentials

-- Sex

No significant gender-based differences in drug use are indicated in Tables 41 and 42 for graduate students or the faculty and staff. But while findings are not statistically significant, one general trend concerning female drug use is worth noting: heavy drug use among the faculty and staff is slightly more prevalent among females than males. As shown in Table 41, 2.9% of women use drugs either in a moderately heavy or heavy manner compared to just 1.3% of men. Among moderate users, women also outpace males, 5.7% using once a month or more compared to 2.6% of males.

-- Race

No significant difference is detected between the drug use of White and non-White faculty and staff. 2.1% of White faculty and staff report being moderately heavy to heavy drug users compared to none (0.0%) of the non-Whites. Among graduate students, Whites are significantly more likely to use drugs than non-Whites. 9.1% of the graduate men who are White use drugs in a moderate to heavy manner compared to none (0.0%) of the non-White graduates. In contrast, more than two-thirds (68.6%) of non-White graduate students have never used drugs compared to only about one-third (36.4%) of White graduates.

-- Religion

No significant differences in drug use for those from different religious backgrounds are disclosed in Tables 41 and 42, either among the faculty and staff or graduate students. At least part of the reason for this finding is that sample sizes are relatively small (generally below 40), making it difficult for chi-square tests to detect small or even moderate differences between groups.

4.5 CAUSES OF ALCOHOL AND DRUG USE: SOCIO-DEMOGRAPHIC, PERSONAL BACKGROUND AND ENVIRONMENTAL FACTORS

In this section, various factors contributing to the use of alcohol and other drugs are explored to determine their relative importance in explaining substance use at the University. Figure 1, presented earlier in this report, provides a diagrammatic representation of the relationship among the three factors discussed here: socio-demographic status, personal background and environmental conditions. These factors are discussed in turn.

A. Socio-demographic Status

-- Alcohol Use

The assessments conducted in Sections 4.2 and 4.4 point out some of the clearly specifiable relationships that exist between individuals' sex, race and religion and their levels of alcohol use. Perhaps most salient among these is that heavy alcohol use occurs far more frequently among males than females. Two other major findings reported above also demonstrate that both Whites and Catholics are significantly over-represented among the subpopulations of heavy alcohol users.

It may be surprising therefore that, as Table 43 documents, Pearson correlations between alcohol use and sex, race and religion, while often statistically significant, are only modest in degree. Among undergraduates, zero-order correlations range from only .06 to .20, while among the faculty and staff vary only between .08 and .14 and among graduate students from .11 to .24.

In general, these findings demonstrate that knowing only that a subpopulation tends to be disproportionately involved in heavier alcohol use does not necessarily help predict the group's involvement in other lesser use levels. This is because, while certain subpopulations (such as men, Catholics or Whites) contain higher proportions of heavy users than are expected by chance, they do not necessarily include smaller numbers of abstainers or light users. 13.2% of undergraduate males are heavy drinkers, compared to just 3.2% of females; however, 7.3% of men have been shown to be abstainers compared to just 7.1% of women. As a whole, while heavy alcohol use is largely a male phenomenon, the correlation among undergraduates between alcohol use and gender is a some what modest .20.

The relationships between alcohol use and the two other socio-demographic variables provided in Table 43 (marital status and age) tend to be relatively weak. Only two of eight possible correlations between these variables exceed .10 (r=.13 for marital status and alcohol use among graduate students and r=.11 for age and alcohol use among the faculty and staff). And, only one of these correlations (r=.11) reaches statistical significance.

It should be stressed that the absence of a clear, substantively large correlation between these variables does not indicate the absence of a meaningful relationship. As undergraduate students age, fewer abstain entirely from alcohol and fewer drink heavily; moderate consumption becomes the norm. The absence of a correlation in Table 43 (r=.00), is indicative only of the absence of a simple, continuously increasing ("linear monotonic") relationship between these variables and the level of alcohol use, not the absence of a significant association.

-- Other Drug Use

The relationship between drug use and socio-demographic status suggests the same general conclusion reached for alcohol use: that while certain categories of individuals are clearly more likely to use chemical substances, overall (correlational) relationships are frequently complex. Males at the University are far more likely to use drugs heavily than are females (Table 26), the association between level of drug use and sex is relatively modest (r=.16). And, while non-Whites at the University are far more likely to use drugs heavily than are Whites (Table 26), the overall correlation between drug use and being White is positive; in other words, Whites are somewhat more likely to use drugs than are non-Whites even if they do not as commonly use these substances heavily.

One of the most unexpected findings in this study is that male faculty and staff members are slightly less likely to use drugs than are their female counterparts (r= -.13 in Table 43). Because this result is so surprising, further inquiry has been made to clarify whether this association holds true among all major sectors of the faculty and staff. Correlations for gender with drug use for the faculty (r=-.07), professional staff (r=-.12) and administrative/ clerical workers (r= -.15), all help to reaffirm the earlier result: among the faculty and staff, men are slightly less likely than women to use drugs.

Among the socio-demographic variables in Table 43, by far the best predictor of drug use is age. Among faculty and staff, the correlation between these two factors reaches r=-.31, while among graduate students it stands at r=-.18. Clearly, within these two subpopulations, older individuals are less likely to use chemical substances than are younger ones. By contrast, age is positively related to increased drug use among undergraduates (r=.11); juniors and seniors (as a whole) are slightly more likely to use drugs than freshmen and sophomores. To summarize the findings here, while drug use tends to increase for undergraduates through the end of their teenage years and into their early twenties, it then declines with increasing age for graduate students and the faculty and staff.

Two other relationships in this section of Table 43 are worth noting. The first suggests among graduate students, Whites are far more likely than non-Whites to use drugs (r=.28). This association does not hold true among the faculty and staff (r=.00), and is only mildly evident among the undergraduate population (r=.12).

The second notable relationship in this section is that faculty and staff members who are single (or divorced or separated) are more likely to use drugs than are those who are married (r=.21). Because this effect may have been detected only because married individuals tend to be older than single persons (and older persons use fewer drugs), the effects of age have been statistically controlled. This procedure has reduced the correlation only marginally (r=.17, p<.05). Apparently, even when the effects of age are removed, single faculty and staff members are more likely to use drugs than are their married colleagues.

B. Personal Background

The relationships between alcohol and drug use and 16 personal background variables are explored in Table 43. An examination of these data suggests one overriding conclusion: although numerous significant relationships exist among these variables, the majority of the correlations are only small or modest in size (r<.20).

Two of the more surprising associations relate to alcohol use and year in school and alcohol and drug use and the importance of religion. The low correlation between alcohol use and year in school (r=-.04) has previously been explained to be the result of a moderating effect on students' drinking as they pass through the University. Both heavy and very light drinking appear to decrease as moderate drinking becomes more of the norm.

The low correlations between the importance of religion and alcohol and drug use (r=-.15 and -.16, respectively), stem from the failure to distinguish between the differing religions included in this study. Among Jews where few proscriptions exist against indulging in light to moderate drinking, greater emphasis on religion might be expected to have only a limited effect on level of consumption. This appears to be the case -- when importance of religion is associated with alcohol Q-F level among Jewish undergraduates, a correlation of just r=-.07 (p >.05) is obtained. Among Protestants where greater censure against drinking exists, the correlation between alcohol use and importance of religion would be expected to be much more substantial. This relationship is also verified (r=-.26, p <.01).(4).

Some of the relationships in the Personal Background section are substantiated as expected. Fraternity/sorority members and residents consume greater amounts of chemical substances than non-members and non-residents. Less expected is the finding that neither academic knowledge or performance, nor knowledge about alcohol, are associated with reduced use of chemical substances. As data in this section of the Table indicate, correlations between alcohol and drug use and overall academic knowledge-/capacity (as measured by English and math SAT scores) are quite low and, in three of four cases, non-significant. In the only instance in which significant results are obtained, English SAT scores are found to correlate positively with drug use (r=.12). In other words, those performing more ably on the English SAT exam tend to use drugs to a slightly greater degree.

Academic standing (measured by whether students are in "good" or "bad" standing with the University) is also found not to correlate with students' use of alcohol and drugs. Although the measure of academic performance used here is somewhat problematic in that the University does not employ a traditional grading system, it appears from the low correlations in Table 43 (r=-.06 for alcohol, r=-.03 for other drugs) that poor academic standing with the University is neither a significant cause of, nor substantially caused by, greater use of chemical substances.

Greater knowledge of alcohol not only does not correlate with reduced levels of substance use, but is significantly associated with increased levels of consumption. The relationship is most pronounced among graduate students (r=.26 for alcohol, r=.23 for other drugs), but is also confirmed among the undergraduate (r=.19 and .16) and total University samples (r=.17 and .18). Only among the faculty and staff is a relationship not evident (r=.01 and .07).

Because these findings are surprising, further analysis has been performed to determine whether some knowledge items (and, therefore, presumably some types of knowledge) are associated with less substance use. An analysis of individual knowledge items, only serves to reconfirm the original findings. Among undergraduates, all nine informational items correlate positively with both increased alcohol consumption and other drug use. (13 of the

18 possible associations [nine for alcohol, nine for other drugs] were statistically significant.) (5)

In summary, this analysis of academic performance, general knowledge and information about alcohol has produced some surprising findings. It may be concluded that while the wider image of drug and heavier alcohol users is often that of the less academically adept individual, in poor standing with the university and possessing limited knowledge of substance use and abuse, the reality at the University appears otherwise.

Two types of data were used to investigate the motivations individuals have for using alcohol and other drugs. First, respondents were asked how happy their lives had been during the past year. Only among the faculty and staff did this measure bear any relation to the respondent's level of substance use. Within this group, those who are happier tend to use slightly fewer drugs (r= -.16) but about the same amount of alcohol (r=-.03).

The second manner of investigating individual motivations for using alcohol and drugs has been to ask respondents directly to assess their reasons for using chemical substances. Among undergraduates and graduates, those who use greater amounts of alcohol and drugs tend to be most motivated by the desire to cheer up, to find something to do and to forget worries. Among the faculty and staff, the greatest motivation stems from a sense of being under pressure. Correlations between substance use and indulging because "it's the polite thing" are relatively low among undergraduates (r=.12 and .03)--suggesting that those who partake to be polite are not those likely to be the regular heavier drinkers.

One final, but important, association in this portion of Table 43 merits attention: the correlation between alcohol use and other drug taking among undergraduates and graduates is notably high (r=.45 and .28, respectively). This suggests that those who use one type of chemical substance (alcohol or other drugs) are more likely to use the other type of substance. The association between alcohol and other drug use for the faculty and staff is just r=.03, indicating greater alcohol use or other drug taking in this subgroup does not serve as an inducement for them to use other types of chemical substances.

C. Environmental Conditions

The effects of peer pressure and chemical substance availability on substance use are explored in the Environmental Conditions section of Table 43. Four measures of peer pressure are provided: alcohol use of respondent's closest friends on campus, alcohol use of respondent's acquaintances, reaction (positive or negative) of respondent's closest friends on campus to the respondent becoming intoxicated, and general emphasis on drinking at social get-togethers at the University. Availability of alcohol and other drugs has been measured by asking respondents how difficult it would be to obtain these chemical substances on campus.

The effect of peer pressure on alcohol and drug use at the University is particularly noteworthy. The two best predictors in this study of alcohol use are close friend and acquaintance use levels. Alcohol consumption of respondents and their closest friends correlate .62 for undergraduates, .58 for graduates and .55 for the University community as a whole. Meanwhile, acquaintance use levels correlate .51 for under graduates, .44 for graduates, .45 for University as a whole and .32 for the faculty and staff.(6)

In addition to the general effect of peer pressure discussed above, normative expectations of drinkers' peers about what constitutes inappropriate drinking also play a significant role in determining respondent alcohol use. As Table 43 indicates, the more negative the reaction of close friends on campus to intoxication, the lower a respondent's regular use tends to be. Correlations of r=-.30 for undergraduates, r=-.34 for graduates and r=-.25 for the overall University sample attest to this finding.

Within the faculty and staff, the correlation between alcohol use and campus friends' reaction to intoxication is quite low and non-significant (r=-.09). This might be explained by the fact that faculty and staff members are generally older and less prone to the effects of peer pressure. This interpretation is problematic because it fails to account for the finding that the correlation obtained for graduate students is not lower than (and is, indeed, slightly higher than) that for undergraduates. An alternative explanation for the low correlation may be that undergraduate and graduate students maintain closer friendship ties on campus than do the faculty and staff, and are more likely to be dissuaded by these friends' negative reactions to intoxication.

The absence of a significant correlation between emphasis on drinking at parties and respondent alcohol use is unexpected. A possible interpretation is that most individuals at the University simply do not attend sufficient numbers of parties for it to influence their regular drinking patterns. Even when attending, they do not feel compelled to drink more than they would like. Among undergraduates, just 4.5% report heavy emphasis on drinking at parties, while 80.4% report mild to very mild emphasis. Even among members of fraternities and sororities, the pressure to drink at parties is not considered great; just 6.3% of Greeks report emphasis to be high, while 77.6% report it to be mild to very mild.

A second explanation for the absence of a correlation between alcohol use and emphasis on drinking at parties is also worth advancing. This is that the measure of "emphasis" used here is problematic. It may be that emphasis on alcohol is a good deal higher than many respondents report, but the pressure to drink may be felt mostly by those not wishing to imbibe. In fraternities and sororities while just 3.1% of moderate to heavy drinkers report heavy emphasis on alcohol, 18.8% of light, infrequent and non-drinkers indicate that emphasis is great.

The last measures in the Environmental Conditions section report the effect of greater chemical substance availability on respondent alcohol and other drug use. On the whole, few significant relationships are indicated, particularly with respect to alcohol. While this may not be unexpected for most subgroups, it is noteworthy that no association between availability and use exists for undergraduates under age 21. The likely reason for the failure to find any relationship between alcohol's availability and respondent use levels is that this substance is widely available to all those on campus, whether they are lighter or heavier users under or over 21. 92.2% of undergraduates indicate that alcohol is either fairly or very easy to obtain on campus -- and students under 21 report the substance to be almost as easy to secure as those over 21. 94.7% of those over 21 report alcohol either fairly or very easy to obtain, while almost the same percentage (92.9%) of those under 21 indicate this.

The availability of drugs is significantly related to drug use levels for all groups except graduate students. Curiously, while greater availability is positively associated with increased use among the faculty and staff (r=.24) and the University community as a whole (r=.10), it is negatively correlated with increased use for undergraduates (r= -.14). Because the negative relationship reported for the undergraduate group is contrary to expectation, a further analysis of this group was undertaken.

Data contained in Table 44 were analyzed by level of respondent drug use. Information demonstrates that while all groups believe drugs to be widely available, the fewer drugs students use the more they believe them to be easy to obtain. It is unclear whether this is the result of a general misconception on the part of students about how widespread drugs are on campus or, alternately, whether drugs seem widely available to those who use them only rarely, but appear less available to those who seek them out on a more regular basis.

4.6 ALCOHOL AND OTHER DRUG-RELATED SERVICES AT THE UNIVERSITY

Alcohol and drug services are designed to fulfill three health-related needs on college campuses: (1) treating those currently troubled by substance abuse; (2) providing information on alcohol and drugs to a broad spectrum of individuals; and (3) furnishing formal educational instruction to students in the various academic disciplines. The present section examines alcohol and other drug-related services at the University, assessing both the levels of awareness and satisfaction of the major subpopulations on campus with these three forms of health assistance.

A. Treatment Services

Only a moderate level of awareness exists on the University campus concerning where to obtain alcohol and drug treatment services. As indicated in Table 45, the highest level of awareness exists among the faculty and staff (where 50.4% are either moderately or very aware of existing services) and among undergraduates (where 45.8% are that aware). A significantly lower level of awareness exists among graduate students; only 18.9% of these individuals are moderately or very aware of existing and nearly 40% have no knowledge of available treatment assistance.

Meriting attention here is whether those individuals who might most need treatment services are also those most aware of available resources. Table 48 sheds some light on this subject. In the Table, eleven indicators of those individuals or groups who drink or consume drugs most heavily (males, fraternity members, etc.) or who have alcohol and/or drug problems are correlated with five measures of awareness of campus services. The Table helps determine whether those individuals or groups that are disproportionately involved with alcohol or drugs are also those most aware of existing treatment, informational and educational resources.

Nearly all the measures in Table 48 have been previously discussed. Two additional indicators were developed for the present analysis. These measures, derived from data in Sections D and E of the University survey questionnaire are: (1) the total number of alcohol-related problems that drinkers have encountered in the past year, and (2) the total number of drug-related problems that users have faced during this time period.

Section A of Table 48 indicates that graduate students and faculty and staff members who drink more heavily are somewhat more likely to be aware of treatment services on campus (r=.16 for both subgroups). This result is not obtained in the undergraduate subpopulation (r=.02). In this group, those who drink more heavily are no more aware of where to secure treatment services than those who drink less.

While graduate students who drink more are more likely to be aware of treatment services, those encountering more alcohol-related problems are no more likely to know the location of assistance (r=.00). A statistically significant association does exist between the number of alcohol problems and awareness of treatment for undergraduates; the correlation between these measures is so low (r-.07) that little substantive meaning can be attached to the relationship.

Few other significant associations exist in this portion of Table 48. Importantly, no relationships are discovered for students or the faculty and staff for either drug use or problems resulting from drugs. It appears that those using more drugs or having more problems as a result of these substances are no more likely than non-substance users to know where to obtain treatment assistance.

Notably, those residing in fraternities and sororities are slightly more likely to know where treatment may be received. This may be the result of the close proximity of these residence halls to campus. Members of fraternities and sororities not living in these residence halls exhibit no greater knowledge of the location of treatment services than do other undergraduates.

Other limited data are available regarding satisfaction with treatment services received. As Table 45 indicates, only 16 undergraduate or graduate students and ten faculty and staff report having used campus alcohol or drug treatment services.

Within the student sample, satisfaction with services rendered is not high. More than two-thirds of the respondents indicate they are either not particularly pleased or very displeased with treatment services provided. Among the faculty and staff, satisfaction with services is much higher; nine of ten of these individuals report being very pleased with treatment provided.

B. Information Services

Only a moderate level of awareness exists concerning where to obtain informational services at the University. Awareness of the availability of information services is nearly identical to that for treatment assistance. As Table 46 indicates, approximately 50% of faculty and staff are moderately or very aware of where to obtain information about alcohol and drug abuse, while only about 20% of graduate students are this well informed.

61.2% of undergraduates and 59.8% of faculty and staff indicate their belief that the University's program in alcohol and drug information is either moderately extensive or very extensive; by contrast, only 25.2% of graduate students believe it is that wide-ranging. It is worth noting that the percentages of individuals who believe informational services on campus are widespread are consistently larger than the percentages of persons who know where to obtain information, suggesting that a considerable amount of individuals have heard of the program but do not know a great deal about its functioning.

More than four-fifths of undergraduates (80.1%) received alcohol and drug information on campus, while only 19.1% never received such resources. Much lower percentages of faculty and staff (49.4%) or graduate students (31.1%) received substance use and abuse information.

Opinion of information received is fairly mixed; 53.1% of undergraduates, 37.5% of graduates and 66.3% of faculty and staff believe it to be either excellent or very good. Conversely, 45.8% of undergraduates, 62.5% of graduates and 34.7% of faculty and staff regard it as only fair or not particularly good. Few people believe the information they received is poor in quality.

Section B of Table 48 provides data on whether those who use alcohol and drugs more heavily are more likely to have received substance use and abuse information. Findings in this section are similar to those obtained in Section A. In essence, they demonstrate that graduate students and faculty and staff who use alcohol to a greater degree are somewhat more aware of where to obtain information (r=.19 and .17, respectively) and know that the University has an extensive program to deal with chemical dependency (r=.22 and .16, respectively). Only graduate students who drink more are more likely to have received information about alcohol and drugs (r=.17); for faculty and staff r=.03.

Among undergraduates, heavier alcohol and drug user groups are neither more aware of the availability or extensiveness of the University's informational program, nor are they more likely to have received information outside class. Overall, even the few statistically significant correlations which are evidenced in this section of Table 48 do not exceed .10--suggesting that, among undergraduates, heavier use groups are not more likely to be aware of campus informational resources.

C. Educational Services

Relatively few undergraduates at the University receive formal classroom instruction about alcohol and drug use and abuse. As Table 47 indicates, fewer than one-fourth (23.3%) of students report any classroom discussion of the subject, while less than one-tenth (9.3%) indicate the subject has been broached in more than one class.

General reaction of undergraduates to the quality of the substance use and abuse instruction they received is quite mixed. While 33.1% believe it to be very good or excellent, 45.6% suggest their instruction has only been fair and 21.3% reveal it to be not particularly good or poor.

Neither undergraduate nor graduate students who are more prone to alcohol or drug use or abuse have received more formal instruction on these subjects than other students. The Educational Services section of Table 48 suitably demonstrates this point: only three of 19 correlations above .10 are statistically significant.

Although most groups or individuals involved with alcohol and drugs have not received greater substance use instruction, several have done so. Most significantly, both fraternity/sorority members and residents received additional classroom education (r=.14 and .15, respectively). Additionally, male graduate students had the subject of alcohol and drugs raised in more classes than their female counterparts (r=.21).

5. DISCUSSION

5.1 OVERVIEW

The intent of this study has been to investigate alcohol and drug use and abuse at the University. More specifically, the goal has been to address three major issues relating to substance use, abuse and treatment. These are:

1. What are the levels of alcohol and drug use at the University? Which groups and types of individuals on the University campus are most affected by alcohol and drug use and abuse?
2. What personal, social and environmental factors are most associated with substance use and abuse at the University?
3. Which groups on campus are most aware of and satisfied with existing informational, educational and treatment services?

The present section reviews and discusses each of these issues directly. Where data are available, results of this investigation are placed in the broader context of findings about substance use and abuse at colleges and universities in the United States and in the northeast section of the country. National and regional data, presented in Tables 49 and 50, provide an added perspective on the level of the University's chemical use and dependency problems.

5.2 ALCOHOL AND OTHER DRUG USE AND ABUSE AT THE UNIVERSITY.

A. Alcohol Use

Most members of the University community consume alcoholic beverages on a regular basis. Data indicate that only about 6% of the University abstain from alcohol, while 94% drink more than once per year. Undergraduates refrain from drinking to a greater extent than does the overall University population -- but even within this group, only 7.2% are abstainers. Even the most abstemious of the groups sampled -- freshmen -- report that over 90% of their members consume alcohol at least once a year.

In general, University undergraduates abstain from alcohol to a lesser degree than do other college students in the United States. As data in Table 49 indicate, the University's abstention rate (7.2%) is less than one-half that of other schools in the northeast section of the country (15.1%) or in the nation as a whole (18.0%).

While it is clear that most members of the University community drink alcoholic beverages on a regular basis, it is not clear that they are excessively prone toward heavy consumption. 1.2% of the faculty and staff drink heavily, while only 2.7% of graduate students do so.

Heavy consumption is more significant among the undergraduate population -- 8.0% of these students drink heavily. Further, when particular subgroups at the University are examined, the problem of excessive use intensifies: 13.2% of males at the University are heavy consumers of alcohol; 13.2% of Catholics; 9.4% of sophomores, 13.7% of freshmen; 15.6% of fraternity and sorority members, and 22.6% of fraternity and sorority house residents.

Still, these figures should be placed in perspective. Although the consumption levels of these groups are disturbingly high, they are nonetheless far lower than those of comparable student subpopulations at other colleges in the country. As Table 49 indicates, the 8.0% heavy use level registered at the University is less than one-half of undergraduates at other colleges in the northeast or nationally. The proportions of males, Catholics, freshmen or sophomores who consume alcohol heavily are far less (by 42-70%) than those at other schools in the region or country as a whole.

B. Problems Resulting from Drinking

-- Alcohol Problems at the University

The majority of individuals at the University who consume alcohol experienced adverse effects stemming from it during the past year. Hangovers are the most common (affecting 49.6% of drinkers surveyed), although driving after having several drinks (23.2%), nausea and vomiting (22.3%), and engaging in sexual activity when ordinarily one would not have (17.7%) are also widespread.

Among the three major subpopulations surveyed for this study, alcohol-related problems are by far the most common among undergraduates, and least frequent among the faculty and staff. 57.5% of undergraduates report having a hangover during the past year, while 29.6% indicate they experienced nausea and vomiting. By comparison, 48.0% of graduate students and 33.1% of the faculty and staff had hangovers and 14.8% of graduates and 8.2% of faculty and staff experienced nausea and vomiting.

It is important to note that while undergraduates report more alcohol-related problems during the past year in nearly every category surveyed, they are less likely than graduate students to believe they might have a problem with alcohol. While 7.2% of undergraduates indicate the possibility of a problem, 8.5% of graduate students do so. It is also significant that, while the number of problems reported by the faculty and staff is substantially lower than those reported by undergraduates in nearly every category, it is not so with regard to whether alcohol represents a personal problem. 5.3% of the faculty and staff have been concerned about having an alcohol problem over the past year.

It appears that if concern about a drinking problem is regarded as a reasonable indicator that alcoholism may be present, then this problem has not been found to vary a great deal among the differing subpopulations at the University. What has been found to vary significantly is the ability of each subpopulation to control the various outward manifestations of its abuse, with the faculty and staff and graduate students performing far better at this task than undergraduates.

-- Alcohol Problems in the United States

Although significant numbers of drinking problems have been discovered at the University, overall levels are substantially less than at other colleges and universities in the nation. As Table 50 demonstrates, undergraduates at schools in both the northeast and the United States experienced many more problems than those at the University. 57.5% of the University students dealt with hangovers in the past year, 74.4% of those in the northeast have done so. 11.0% of undergraduates at the University drove after having too much to drink, and 32.4% of those in the northeast have done this.

A thorough examination of Table 50 reveals that in only one of 15 possible cases are University students more likely to have greater alcohol-related problems during the past year than those at other northeastern schools. And, with respect to this problem (which involves "trouble with the law"), University students exhibit only very marginally greater numbers of problems (3.0% versus 2.7%).

Probably the most interesting piece of information in Table 50 relates to the finding that, while undergraduates at other northeastern schools exhibit far greater numbers of alcohol-related problems than students at the University, virtually the same percentage believe they might have personal difficulty with drinking (7.2% for University undergraduates, 7.3% for other northeastern students). It would appear the potential problem of alcoholism at the University is largely no different than it is at other schools in the northeast, except that University undergraduates tend to exhibit fewer outward manifestations their underlying difficulties.

Table 50 also provides some interesting lifetime alcohol use comparisons for students at the University, other northeast colleges, and nationally. 65.1% of the University undergraduates compared to 40.2% of a national sample report having experienced alcohol-induced nausea and vomiting during their lifetime. 19.5% of the University undergraduates compared to 7.3% of a national sample report coming to class after drinking. Most revealing is the perception reported among the University undergraduates that they "thought they might have a problem with drinking"; 16.5% of the University's undergraduates compared to 7.2% of a national sample. It is significant to note that these categories of alcohol-related problems are higher among students at the University than among the national undergraduate sample. One speculation is that the higher percentages reported at the University reflect problem drinking behavior early in one's undergraduate life or prior to acceptance at the University. Future research might be undertaken to clarify these three "life-time" measures.

C. Drug Use and Abuse

Marijuana and hashish are the most frequently used drugs among all subpopulations at the University. Over one-half of those at the University tried these substances during their lifetime, while slightly over one-fourth experimented with them in the past year. Use of other drugs, such as cocaine, is much less common, with past year use levels standing at less than 10%.

Drug use rates vary considerably by subpopulation. Undergraduate substance use is much higher than that of graduate students or the faculty and staff. Among undergraduates, 38.5% take some type of chemical substance at least once per year, while less than half as many graduate students (17.7%) use substances this frequently, and only about one-third of faculty and staff members (12.9%) use this often.

Heavy use of drugs is also more common among undergraduates than other subpopulations at the University. 1.5% of undergraduates at the school consume chemical substances every day compared to 0.9% of graduates and 0.4% of faculty and staff.

As these daily use rates demonstrate, regular heavy use of drugs is not a common phenomenon at the University. Still, certain groups on campus are disproportionately involved in substance use. While moderately heavy or heavy use of drugs (at least once per week) is evident among 5.0% of those at the University and 6.5% of undergraduates, it is also characteristic of: 7.1% of seniors, 9.4% of juniors, 9.2% of arts and humanities majors, 9.4% of undergraduate Jews, 10.4% of undergraduates with no religious background, 9.5% of undergraduates who are non-religious, 10.8% of undergraduate males, 13.0% of fraternity and sorority members, 9.7% of fraternity/ sorority residents and 13.9% of undergraduates living off-campus.

Data that allow precise comparisons to be made between drug use at the University and other schools in the northeast or the United States are not available. One recent study (Johnston et al., 1986), provides use levels measured in a roughly similar manner as that employed here.

Data from Johnston et al.'s investigation indicate that national use rates for drugs typically far exceed those at the University. 3.1% of college students nationally in 1985 used marijuana on a daily basis, while 0.1% used cocaine. At the University, 1.2% of undergraduates currently use marijuana (or hashish) daily, while 0.2% use cocaine every day. Thirty-day prevalence rates (the percent reporting use in the last month) for college students nationally were as follows: marijuana, 23.6%, cocaine, 6.9%, and all illicit drugs, 46.3%. At the University, 15.1% of undergraduates report using marijuana (or hashish) at least once per month, while 2.2% use cocaine that often and 15.7% use some drug at least monthly.

The percentage of graduate students and faculty and staff who used drugs and encountered problems during the past year is far less than that of undergraduates. The proportion of undergraduates who encountered problems in the past year exceeds that of both graduate students and the faculty and staff on all 12 measures surveyed.

Interestingly, graduate students had higher numbers of lifetime problems than undergraduates on four of the 12 measures utilized in the survey -- suggesting that graduate students, when they were younger, were not substantially different from the undergraduate sample now. It is likely that the lower number of current problems experienced by graduate students is the result of a longitudinal decline in their involvement with drugs.

5.3 PERSONAL, SOCIAL AND ENVIRONMENTAL FACTORS AFFECTING SUBSTANCE USE AND ABUSE

Most of the findings of this study corroborate those obtained elsewhere concerning the causes and correlates of drinking (see, for example, Wechsler and McFadden, 1979; Engs, 1977; Strauss and Bacon, 1953; Blane and Hewitt, 1977; Jessor and Jessor, 1977, 1985). To summarize the relationships discovered at the University: alcohol use is more common among males, Whites, Catholics, Jews (although not heavy use), those less religious, members and residents of fraternities and sororities, those taking more drugs, and those facing greater peer pressure to drink. Drug use is more common among males, whites, younger faculty and staff members and graduate students, upperclassman undergraduates, those less religious, members and residents of fraternities and sororities, those drinking more heavily, and those facing greater peer pressure to use drugs.

Although the bulk of the results of this study confirm those evidenced elsewhere, a number of unexpected findings have appeared. Female faculty and staff were found to use more drugs than their male counterparts, availability of alcohol on campus has been demonstrated to be unrelated to alcohol use, emphasis on drinking at parties has not been shown to be related to levels of alcohol use, and greater perceived availability of drugs on campus has been demonstrated to be negatively associated with the levels of student drug use. But while each of these findings has been somewhat surprising, none of the relationships has been as unexpected as that between academic achievement and capacity and substance use. It is worth reviewing this finding.

Although most researchers who studied the relationship between drinking and other drug use and academic achievement found significant negative correlations (Engs, 1977; Kandel, 1982), the present study finds either little association between the two factors or correlations in the direction opposite from what is expected. Better academic standing at the University has been discovered to be only mildly related (at best) to decreased alcohol use, and unrelated to decreased drug use. General knowledge (as measured by students' SAT scores) has generally been unrelated to alcohol or drug use -- while the one exception to the absence of association suggests that those performing more capably on English SAT scores tend to have higher levels of drug use. And the more students and others at the University know about alcohol use and abuse, the more alcohol and drugs they are likely to consume.

The reason for these findings is unclear. They challenge the image of the drug user and heavier alcohol user as a less academically adept individual, in poor standing with the University, and possessing limited knowledge of substance use and abuse.

5.4 INFORMATIONAL, EDUCATIONAL AND TREATMENT SERVICES

This report has demonstrated that the University has accomplished much with respect to dealing with its substance abuse problems. The University's program (including its treatment and referral services, prevention and education programs and courses, legislative policies, public relations and mass media operations, enforcement and judicial projects and procedures and administrative agencies and components) has been found to exceed most colleges and universities in the United States in terms of both its scope and comprehensiveness. The program's breadth raises some important questions as to whether this may help to examine the finding that both alcohol and drug use and abuse at the University appear to be lower than at other college campuses in the northeast or in the United States.

Despite the apparent success of the University program in chemical dependency in devising a wide-ranging program, a number of important health promotion issues have been demonstrated to exist, and these warrant further study. For example:

- Only moderate levels of awareness exist among University undergraduates concerning where students can obtain alcohol or drug treatment or informational services.
- Satisfaction with treatment services rendered and information received on campus about alcohol and drugs is not high among undergraduate or graduate students. (Faculty and staff do, however, indicate high levels of approval of treatment services received as well as relatively high opinions of information disseminated.)
- Relatively few students at the University (23.3%) have had classes in which alcohol and drug use and abuse have been discussed.
- General reaction of undergraduates to the quality of classroom substance use and abuse education is quite mixed, with most students feeling that instruction has only been "fair." (It is unclear whether students did not care for the instruction received or whether they felt it was insufficient.)
- While awareness of the extensiveness of the University's informational program concerning alcohol and drugs appears to be relatively high among undergraduates and the faculty and staff, more than one-half of all graduate students know nothing about the program.
- Undergraduates who use more alcohol or drugs or are part of socio-demographic groups or membership organizations that are more prone to substance abuse tend to know no more about where to receive treatment or informational assistance on campus than undergraduates in general.

5.5 CONCLUSION

The University program in chemical dependency has clearly come a long way in developing the type and breadth of programs necessary to cope with the continuing challenge of alcohol and drug abuse on campus. The current study has been designed to highlight those groups and individuals most in need of assistance for their alcohol and drug abuse as well as those who are unaware of available informational, educational and treatment resources.

FOOTNOTES

1. Donovan and Jessor's definition of problem drinking for youth and adolescents is relatively liberal. Those who have been drunk five or more times and/or have two or more life areas in which negative consequences have occurred in the past year are so classified.

2. The sole component of the eight that has not been developed involves undertaking cooperative efforts with local beer distributors and/or advertisers to promote responsible drinking on campus. While this activity does not appear to have been carried out at the University, explicit guidelines have been instituted which are reducing improper advertising of alcohol and alcohol-related activities on campus.

3. The number of respondents listed in these four subgroups actually totals 975. Four individuals listed themselves as both staff and graduate students. Because it is unclear whether these persons received questionnaires as staff or students, they were included in both groups for subgroup analyses, but were counted only once when total respondents was computed.

4. It is worth noting that the correlation on these variables for Catholics is $r=-.11$ ($p <.05$).

5. Data are not shown here because of limitations on space.

6. The relationship between faculty and staff alcohol use and that of their closest friends on campus has been omitted from the discussion here. This is because the correlation obtained ($r=.26$) may well be artificially low. As a number of respondents in this group mentioned on their survey forms, they either do not have close friends on campus or do not know how these on-campus friends drink. Note that the question asked on the survey concerning the use level of respondents' acquaintances is not problematic because it makes no distinction between whether these peers are known on or off campus.

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Figure 1. General Model of Alcohol and Drug Use and Abuse and Service Utilization and Satisfaction

Predisposing Variables → Behavioral Variables → Service-Related Variables

Socio-Demographic Status
- age
- sex
- ethnicity
- religion
- marital status

Personal Background
- School/Work Status
  - year in school
  - school standing
  - major/concentration
  - number of years at work
  - type of work
- Personal Lifestyle
  - religiosity
  - residential status (type of housing)
  - fraternity/sorority membership
- Psychological Attributes
  - beliefs
  - attitudes
  - knowledge
  - motivations
  - natural intelligence
  - personal happiness

Environmental Conditions
- Peer Pressure
  - usage levels
  - attitudes
- Availability of Alcohol and Drugs

Alcohol and Drug Use
- Quantity consumed
- Frequency of consumption

Alcohol and Drug Abuse/ Problems
- peer criticism
- missing school/work
- arrested
- fights
- lost job
- driven a car after or while using
- unprotected intercourse

Awareness and Use of:
- Treatment Services
- Educational Instruction
- Informational Services

Satisfaction with:
- Treatment Services
- Educational Instruction
- Informational Services

Table 1. Comparison of the percent of students from the same colleges between 1983 and 1985 and their drinking patterns in terms of drinkers and heavy drinkers among different demographic variables. (a)

	DRINKERS		HEAVY DRINKERS	
SEX	1983	1985	1983	1985
Males	86.6	86.6	38.5	38.2
Females	80.0	79.1	16.1	17.1
RACE				
White	84.7	84.2	26.8	26.2
Black	57.7	62.0	7.6	21.6*
CLASS				
Freshmen	81.2	77.1+	30.6	29.0
Sophomores	83.1	81.9	25.0	31.1+
Juniors	82.0	83.8	23.6	23.7
Seniors	85.2	87.3	20.6	16.6
REGION OF COUNTRY				
North East	88.7	85.4+	26.7	25.9
North Central	86.7	84.4	31.0	25.1+
South	70.8	73.0	20.0	25.4+
West	83.0	84.3	24.2	26.5
SIZE OF COLLEGE				
< 10,000	82.5	81.3	27.2	27.0
> 10,000	82.7	82.3	23.6	24.6
GPA				
4.0	73.6	78.6	17.3	43.0*
3.5	76.7	74.3	15.4	15.2
3.0	84.2	82.5	24.7	21.6
2.5	85.5	84.8	27.9	29.7
2.0	80.4	83.5	36.5	34.7
<2.0	86.2	83.6	45.3	51.8
TOTAL	82.6	81.8	25.5	25.7

(a) DRINKERS - Consuming alcohol once in the past year or more. Comparison over the two time periods for this were obtained from chi-square analysis of abstainers and drinkers. HEAVY DRINKERS - consuming 6+ drinks once a week or more at any one sitting. Calculations between the two time periods were obtained from chi-square analysis of heavy and all other drinkers.

+p<.05; *p<.001.

Source: Engs and Hanson, 1985a

Table 2. Percentage of students who drink at least once a year reporting alcohol-related problems occurring at least once during past year.

Alcohol Related Problem	SUB-SAMPLE 1974 (N=1128)	 1982 (N=810)
Hangover	56.2	60.7*
Driving After Drinking	49.4	48.1
Driving While Drinking	30.5	35.8+
Nausea And Vomiting	37.3	37.3
Driving After Knowing Drunk Too Much	29.9	30.9
Missed Class From Hangover	16.6	18.8+
Fight After Drinking	9.1	8.5
Criticized By Date	9.7	9.8
Damaged University Property	8.8	6.8
Know Have Problems With Alcohol	8.5	6.8
Missed Class After Drinking	10.9	8.2
Went To Class After Drinking	11.1	7.6
Received Lower Grade	4.1	3.6
Had Problems With Law	3.5	2.0
Trouble With School Administration	1.8	1.1
Arrested For Driving While Intoxicated	1.8	0.5
Lost Job Because Of Drinking	0.6	0.4

+p<.05; *p<.001.

Source: Engs and Hanson, 1985a

Table 3. Results of the college alcohol survey, 1985.

Alcohol Policies and Programs	Percentages of Affirmative Responses			Year-to-Year Comparisons (% scores)		
	1979	1982	1985	1979-1982	1982-1985	1972-198
ALCOHOL POLICIES						
Alternative (non-alcoholic) beverage required at public functions serving alcohol	54	74	86	3.63*	2.71*	5.79*
Food required at public functions serving alcohol	24	46	71	3.94*	4.63*	7.69*
Permissable for event advertising to state availability of alcohol	66	52	54	2.63*	.38	2.10*
Permissable for alcohol to be advertised as primary focus of an event	49	23	13	5.14*	2.42*	6.71*
ALCOHOL PROGRAMS						
Alcohol Treatment						
Group counseling for problem drinkers	33	36	50	.62	2.94*	3.25*
Support group for those negatively affected by an alcoholic	21	39	53	3.73*	2.90*	6.15*
Employee assistance program for employee drinking problems	-	28	33	-	1.11	-
Training for the paraprofessional staff to deal with student drinking problems	62	69	69	1.37	0	1.34
Counseling assistance provided by:						
Counseling Center	90	94	95	1.48	.46	1.84
Health Center	-	69	73	-	.32	-
Alcohol Education Coordinator	-	26	34	-	1.83	-
Off-Campus Drug Treatment Facility	-	69	86	-	4.20*	-
Residence Hall Staff	-	67	79	-	2.80	-

Table 3
Continued (P.2)

Alcohol Policies and Programs	Percentages of Affirmative Responses 1979	1982	1985	Year-to-Year Comparisons (% scores) 1979-1982	1982-1985	1972-1985
Faculty Members	-	36	40	-	.86	-
Crisis Hotline	-	32	35	-	.66	.63
Campus Ministry	69	71	72	.43	.23	-
Alcohol Prevention and Education						
Prevention and education efforts on campus	69	79	88	2.26*	2.50*	4.46*
Increased trend to more education and prevention programming	71	79	87	1.80*	2.17*	3.73*
Offices or organizations on campus providing leadership with efforts:						
Dean of Students	65	65	78	0	2.94*	2.73*
Office of Residence Life	53	68	76	3.04*	1.83	4.56
Counseling Center	44	59	62	2.96*	.63	3.40
Fraternities/Sororities	-	18	29	-	2.70	-
Health Center	38	43	55	1.00	2.47	3.21*
Academic Departments	10	18	18	2.26*	0	2.15*
Student Governments	-	18	22	-	1.03	-
Task force, committee, etc. which focuses on subject	37	58	64	4.11*	1.27	5.10*
Alcohol education coordinator/ specialist	14	36	48	4.85*	2.52*	6.84*
Campus orientation for new students deal with alcohol abuse	-	38	51	-	2.71*	-
Course dealing primarily with alcohol/substance abuse	-	36	41	-	1.06	-
Literature available on campus for students	63	76	83	2.77*	1.78	4.30*
Alcohol focus period (Awareness Day/Week)	13	31	63	4.04*	6.63*	9.43*
Efforts include:						
Information/articles in campus publications (e.g., newspapers)	52	67	76	3.02*	2.07*	4.80*

Table 3
Continued (P.3)

Alcohol Policies and Programs	Percentages of Affirmative Responses			Year-to-Year Comparisons (% scores)		
	1979	1982	1985	1979-1982	1982-1985	1972-198
Films shown on campus	45	50	63	.99	2.73*	3.45*
Discussion Groups	41	43	50	.40	1.46	1.72
Workshops focusing on drinking attitudes	39	52	61	2.57*	1.89*	4.19*
Speakers	44	46	63	.40	3.56*	3.64*
Posters/slogan campaigns	30	44	60	2.84*	3.34*	5.73*
Academic courses	24	28	28	.89	0	.87
Bulletin Board competiton	6	6	11	0	1.89	1.68
Radio/TV	15	14	21	.28	1.93	1.49
Educational handouts prepared by campus groups	26	36	51	2.11*	3.16*	4.87*

*p<.05

Source: Anderson and Gadaleto, 1985

Table 4. College alcohol programs, 1982. (a)

Type of Program	All Institutions (%)	Private Universities (%)	Private Liberal-arts Colleges (%)	Northeast	
				Private (%)	Public (%)
Special Programs:					
To educate about effects of alcohol	68.5	76.0	73.1	71.4	86.7
To treat effects of excessive use	44.2	56.0	42.3	50.0	60.0
Alcohol awareness days	45.9	48.0	40.4	50.0	73.3
Advertising campaigns	33.7	40.0	26.9	35.7	46.7
Staff to handle alcohol problems	61.9	76.0	59.6	71.4	53.3
Alcoholics Anonymous	21.0	22.0	19.2	32.1	33.3
Al-Anon	12.2	18.0	11.5	21.4	26.7
Alcohol-education course	21.0	24.0	15.4	28.6	13.3
Alcohol-education units academic courses	29.8	32.0	9.6	35.7	60.0
Referrals to professional counselors and therapists	86.2	92.0	86.5	89.3	100.0
Average	42.4	48.4	38.5	48.6	55.3

(a) Survey data are perceptions reported by deans of student affairs at 181 institutions in a stratified random sample. Survey conducted by John Minter Associates.

Source: Ingalls, 1982

Table 5. Socio-Demographic and Background Characteristics.

Characteristic	Total Population Frequency (N)	Total Population Percent (%)	Undergraduates Frequency (N)	Undergraduates Percent (%)
SEX				
Male	505	52.1	288	48.1
Female	464	47.9	311	51.9
RACE/ETHNICITY				
White	792	82.7	478	81.0
Black	45	4.7	33	5.6
Hispanic	25	2.6	16	2.7
Asian American	49	5.1	45	7.6
Foreign	42	4.4	15	2.5
Other	5	0.5	3	0.5
RELIGION RAISED IN				
Catholic	251	26.2	144	24.3
Protestant (allowing drinking)	294	30.7	151	25.5
Protestant (not allowing drinking)	28	2.9	10	1.7
Jewish	184	19.2	140	23.6
None	163	17.0	126	21.2
IMPORTANCE OF RELIGION				
Very Important	165	17.1	101	17.0
Moderately Important	197	20.5	123	20.7
Mildly Important	238	24.7	158	26.6
Not Important	363	37.7	213	35.8
YEAR IN SCHOOL				
Freshman	-	-	153	25.5
Sophomore	-	-	149	24.9
Junior	-	-	127	21.2
Senior	-	-	170	28.4

Table 5
Continued (P.2)

Characteristic	Total Population Frequency (N)	Total Population Percent (%)	Undergraduates Frequency (N)	Undergraduates Percent (%)
CONCENTRATION				
Social Science	-	-	141	23.5
Arts/Humanities	-	-	208	34.7
Science/ Engineering	-	-	177	29.5
Other	-	-	73	12.2
ACADEMIC STANDING				
Good Standing	-	-	577	96.3
Not Good Standing	-	-	22	3.7
FORM OF HOUSING				
Campus Housing	-	-	409	68.3
Off-Campus	-	-	156	26.0
Fraternity/ Sorority House	-	-	31	5.2
Other	-	-	3	0.5
FRATERNITY/SORORITY MEMBERSHIP				
Yes	-	-	77	12.9
No	-	-	520	87.1

Table 6. Frequency of use of beer, wine and spirits among the total university community, in percent.

	TYPE OF BEVERAGE		
Frequency Of Use	Beer	Wine	Spirits
Every Day	2.7	3.1	1.8
At Least Once A Week But Not Every Day	31.8	13.2	13.7
At Least Once A Month But Less Than Once A Week	26.7	39.5	36.5
More Than Once A Year But Less Than Once A Month	17.9	28.5	28.8
Once A Year Or Less	6.4	4.3	7.0
Never	14.6	11.4	12.2

Table 7. Frequency of use of beer, wine and spirits among under graduates, in percent.

	TYPE OF BEVERAGE		
Frequency Of Use	Beer	Wine	Spirits
Every Day	1.5	0.2	0.2
At Least Once A Week But Not Every Day	33.9	8.7	13.5
At Least Once A Month But Less Than Once A Week	29.6	38.8	43.6
More Than Once A Year But Less Than Once A Month	13.7	33.8	26.6
Once A Year Or Less	6.2	5.0	5.4
Never	15.1	13.5	10.7

Table 8. Percentages of the total university community in Q-F levels, by type of beverage and overall.

Q-F Level	TYPE OF BEVERAGE Beer	Wine	Spirits	Overall
Abstainers	20.9	15.7	19.2	6.2
Infrequent Drinkers	17.9	28.5	28.8	12.4
Light Drinkers	19.9	30.3	23.9	21.8
Moderate Drinkers	23.5	20.6	21.4	35.8
Moderately-Heavy Drinkers	12.7	4.4	6.0	18.3
Heavy Drinkers	5.1	0.4	0.7	5.6

Table 9. Percentages of undergraduates in Q-F levels, by type of beverage and overall.

	TYPE OF BEVERAGE			
Q-F Level	Beer	Wine	Spirits	Overall
Abstainers	21.2	18.6	16.1	7.2
Infrequent Drinkers	13.7	33.8	26.6	12.9
Light Drinkers	20.6	27.8	24.9	21.7
Moderate Drinkers	18.9	16.4	22.6	27.3
Moderate-Heavy Drinkers	18.2	3.0	8.7	22.9
Heavy Drinkers	7.4	0.5	1.2	8.0

Table 10. Percentage of total university population who drink (N=921) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	49.6	76.7
Nausea And Vomiting	22.3	64.8
Driven After Having Several Drinks	23.2	55.1
Driven After Knowing Had Too Much To Drink	9.7	41.0
Drinking While Driving	8.4	23.4
Arrested For DWI	0.3	0.7
Came To Class After Drinking	4.3	15.5
Missed Class Because Of Hangover	9.9	20.1
Criticized Because Of Drinking	5.2	13.3
Had Trouble With Law Because of Drinking	1.6	5.3
Lost Job Because Of Alcohol	0.2	0.3
Trouble With University Administration Due To Drinking	0.8	1.5
Gotten Into A Fight After Drinking	2.2	8.9
Thought You Might Have A Problem With Drinking	6.8	16.6
Damaged Property After Drinking	3.2	9.3
Were Sexually Active When Otherwise Might Not Have Been	17.7	44.0
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	6.7	20.7

Table 11. Percentage of undergraduates who drink (N=570) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	57.5	73.8
Nausea And Vomiting	29.6	65.1
Driven After Having Several Drinks	21.7	47.5
Driven After Knowing Had Too Much To Drink	11.0	34.8
Drinking While Driving	10.3	24.0
Arrested For DWI	0.6	0.8
Came To Class After Drinking	6.3	19.5
Missed Class Because Of Hangover	14.5	24.3
Criticized Because Of Drinking	6.3	12.3
Had Trouble With Law Because of Drinking	3.0	6.1
Lost Job Because Of Alcohol	0.4	0.6
Trouble With University Administration Due To Drinking	1.1	2.3
Gotten Into A Fight After Drinking	3.0	9.1
Thought You Might Have A Problem With Drinking	7.2	16.5
Damaged Property After Drinking	4.7	11.2
Were Sexually Active When Otherwise Might Not Have Been	24.4	46.5
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	8.9	21.2

Table 12. Percentage of freshmen who drink (N=141) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	55.0	67.0
Nausea And Vomiting	39.0	60.1
Driven After Having Several Drinks	14.9	32.0
Driven After Knowing Had Too Much To Drink	7.1	19.1
Drinking While Driving	7.8	15.6
Arrested For DWI	0.0	0.0
Came To Class After Drinking	8.5	17.7
Missed Class Because Of Hangover	13.5	17.7
Criticized Because Of Drinking	7.1	12.8
Had Trouble With Law Because of Drinking	2.8	6.4
Lost Job Because Of Alcohol	0.7	0.7
Trouble With University Administration Due To Drinking	2.1	2.1
Gotten Into A Fight After Drinking	3.5	8.5
Thought You Might Have A Problem With Drinking	7.1	14.9
Damaged Property After Drinking	4.3	10.6
Were Sexually Active When Otherwise Might Not Have Been	21.3	35.5
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	7.1	10.6

Table 13. Percentage of sophomores who drink (N=142) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	64.7	78.7
Nausea And Vomiting	35.2	65.5
Driven After Having Several Drinks	24.6	47.9
Driven After Knowing Had Too Much To Drink	15.5	33.8
Drinking While Driving	10.6	23.9
Arrested For DWI	1.4	1.4
Came To Class After Drinking	5.6	17.6
Missed Class Because Of Hangover	20.4	30.3
Criticized Because Of Drinking	10.6	15.5
Had Trouble With Law Because of Drinking	5.6	8.5
Lost Job Because Of Alcohol	.7	1.4
Trouble With University Administration Due To Drinking	2.1	2.1
Gotten Into A Fight After Drinking	4.2	6.3
Thought You Might Have A Problem With Drinking	7.7	12.7
Damaged Property After Drinking	7.0	13.4
Were Sexually Active When Otherwise Might Not Have Been	32.4	48.6
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	12.0	23.2

Table 14. Percentage of juniors who drink (N=120) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	44.4	74.4
Nausea And Vomiting	20.7	66.1
Driven After Having Several Drinks	20.7	52.1
Driven After Knowing Had Too Much To Drink	9.1	43.0
Drinking While Driving	9.1	24.0
Arrested For DWI	0.0	0.0
Came To Class After Drinking	5.0	20.8
Missed Class Because Of Hangover	10.7	23.1
Criticized Because Of Drinking	4.2	8.3
Had Trouble With Law Because of Drinking	2.5	3.3
Lost Job Because Of Alcohol	0.0	0.0
Trouble With University Administration Due To Drinking	0.8	3.2
Gotten Into A Fight After Drinking	2.5	10.1
Thought You Might Have A Problem With Drinking	6.7	14.2
Damaged Property After Drinking	5.0	10.8
Were Sexually Active When Otherwise Might Not Have Been	27.5	51.0
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	7.5	24.2

Table 15. Percentage of seniors who drink (N=167) reporting alcohol-related problems at least once once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	57.5	75.4
Nausea And Vomiting	23.4	68.0
Driven After Having Several Drinks	26.0	57.0
Driven After Knowing Had Too Much To Drink	11.4	43.1
Drinking While Driving	13.2	31.1
Arrested For DWI	0.6	1.2
Came To Class After Drinking	6.0	21.6
Missed Class Because Of Hangover	13.2	25.7
Criticized Because Of Drinking	3.6	12.0
Had Trouble With Law Because of Drinking	0.6	6.0
Lost Job Because Of Alcohol	0.0	0.0
Trouble With University Administration Due To Drinking	0.0	1.8
Gotten Into A Fight After Drinking	1.8	11.4
Thought You Might Have A Problem With Drinking	7.2	22.8
Damaged Property After Drinking	3.0	10.2
Were Sexually Active When Otherwise Might Not Have Been	18.0	50.9
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	9.0	26.3

Table 16. Relationship between alcohol Q-F level and socio-demographic and back ground variables for undergraduates, in percent.

				Q-F Level			
Socio-demographic or Background Variable	N	Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
SEX***							
Male	287	7.3	10.5	15.0	24.4	29.6	13.2
Female	311	7.1	15.1	28.0	29.9	16.7	3.2
RACE***							
White	477	5.7	10.1	22.9	27.9	24.9	8.6
Non-White	112	14.3	25.9	16.1	24.1	13.4	6.3
COLLEGE CLASS**							
Freshman	153	10.5	16.3	15.0	20.9	23.5	13.7
Sophomore	149	6.7	8.1	23.5	26.2	26.2	9.4
Junior	127	7.1	15.7	21.3	29.9	21.3	4.7
Senior	169	4.7	11.8	26.6	32.0	20.7	4.1
RELIGION RAISED IN*							
Roman Catholic	144	6.9	13.2	17.4	25.7	23.6	13.2
Protestant	161	8.7	13.0	23.0	19.3	27.3	8.7
Jewish	140	3.6	12.1	29.3	30.0	19.3	5.7
None	125	9.6	10.4	17.6	33.6	24.0	4.8
IMPORTANCE OF RELIGION***							
Very Important	101	17.8	24.8	19.8	13.9	15.8	7.9
Moderately Important	123	4.9	10.6	22.8	28.5	21.1	12.2
Mildly Important	158	4.4	10.8	25.3	29.7	23.4	6.3
Not Important	212	5.7	10.4	19.3	30.7	26.9	7.1
FRATERNITY/SORORITY MEMBERSHIP***							
Yes	77	1.3	6.5	9.1	33.8	33.8	15.6
No	519	7.9	13.9	23.7	26.2	21.4	6.9
FORM OF HOUSING***							
On-Campus	409	-	25.4(a)	20.5	25.9	19.6	8.6
Off-Campus	158	-	10.1(a)	27.2	31.0	27.8	3.8
Fraternity/ Sorority House	31		0.0(a)	9.7	25.8	41.9	22.6
MAJOR/CONCENTRATION							
Social Science	140	5.7	13.6	20.7	28.6	21.4	10.0
Arts/Humanities	208	5.8	11.1	22.1	31.7	21.6	7.7
Science/Engineering	177	10.2	13.6	20.9	23.2	26.0	6.2
Other	73	6.8	15.1	24.7	21.9	21.9	9.6

Table 16.
Continued (P.2)

Socio-demographic or Background Variable	N	Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
ACADEMIC STANDING							
Good Standing	576	-	-	42.5(b)	26.9	22.6	8.0
Not Good Standing	22	-	-	22.7(b)	36.4	31.8	9.1

Q-F Level is printed above the Abstain to Heavy columns.

(a) Represents the total of the abstainer and infrequent drinker categories.
(b) Represents the total of the abstainer, infrequent, and light drinker categories.

*p.<.05; **p.<.01; ***p.<.001.

Table 17. Relationship between alcohol Q-F level and socio-demographic and background variables for the total university community, in percent.

Socio-demographic or Background Variable	N	Q-F Level Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
SEX***							
Male	503	5.6	10.1	15.5	38.6	21.9	8.3
Female	464	6.7	14.9	28.7	33.0	14.4	2.4
RACE***							
White	790	4.9	9.6	23.0	37.3	19.4	5.7
Non-White	166	12.0	25.9	15.7	28.9	12.0	5.4
RELIGION RAISED IN*							
Roman Catholic	251	5.6	13.1	14.7	37.8	19.9	8.8
Protestant	321	7.5	10.6	24.6	34.3	18.4	4.7
Jewish	184	3.3	12.0	28.8	35.9	15.8	4.3
None	162	8.0	13.0	17.9	35.2	21.0	4.9
IMPORTANCE OF RELIGION***							
Very Important	165	12.7	21.8	19.4	26.7	13.9	5.5
Moderately Important	196	5.6	10.7	26.0	34.2	15.8	7.7
Mildly Important	238	4.6	9.2	23.1	37.8	19.7	5.5
Not Important	362	4.4	11.0	19.9	39.2	20.7	4.7

*p<.05; **p<.01; ***p<.001.

Table 18. Frequency of drug use for the total university community, in percent.

	TYPE OF DRUG			
Frequency Of Use	Cocaine	Marijuana	Other	Overall
Every Day	.1	.9	.1	1.1
At Least Once A Week But Not Every Day	.1	3.9	0.0	3.9
At Least Once A Month But Less Than Once A Week	1.2	6.3	2.0	6.9
More Than Once A Year But Less Than Once A Month	7.2	15.3	4.7	17.3
Once a Year or Less	13.0	27.0	10.9	25.7
Never	78.4	46.5	82.2	45.0

Table 19. Frequency of drug use for undergraduates, in percent.

	TYPE OF DRUG			
Level Of Use	Cocaine	Marijauna	Other	Overall
Every Day	.2	1.2	.2	1.5
At Least Once A Week But Not Every Day	.2	5.0	0.0	5.0
At Least Once A Month But Less Than Once A Week	1.8	8.9	2.5	9.2
More Than Once A Year But Less Than Once A Month	10.0	20.9	6.2	22.8
Once A Year Or Less	15.1	23.7	10.9	22.1
Never	72.7	40.3	80.2	39.4

Table 20. Percentage of total university population who have used drugs (N=495) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	8.3	18.2
Driven A Car After Using Drugs	17.0	39.4
Taken Drugs While Driving	10.7	21.2
Arrested For Driving Under The Influence Of Drugs	0.2	0.4
Come To Class Or Work After Taking Drugs	10.3	24.8
Missed Class Because Of A Drug Hangover	3.8	9.3
Had Trouble With Law Due To Drugs	0.4	2.8
Lost A Job Because Of Drugs	0.4	0.4
Gotten Into A Fight After Taking Drugs	0.6	2.2
Had Trouble With University Administration Due To Drugs	0.0	0.2
Thought You Might Have A Problem With Drugs	5.1	12.7
Damaged Property After Using Drugs	1.0	2.8

Table 21. Percentage of undergraduate population who have used drugs (N=337) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	10.7	19.9
Driven A Car After Using Drugs	20.8	38.3
Taken Drugs While Driving	12.5	20.7
Arrested For Driving Under The Influence Of Drugs	0.3	0.3
Come To Class Or Work After Taking Drugs	13.1	28.2
Missed Class Because Of A Drug Hangover	5.6	10.4
Had Trouble With Law Due To Drugs	0.6	3.3
Lost A Job Because Of Drugs	0.6	0.6
Gotten Into A Fight After Taking Drugs	0.9	3.3
Had Trouble With University Administration Due To Drugs	0.0	0.3
Thought You Might Have A Problem With Drugs	6.8	14.8
Damaged Property After Using Drugs	1.5	3.6

Table 22. Percentage of freshman population who have used drugs (N=66) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	15.2	21.2
Driven A Car After Using Drugs	19.7	31.8
Taken Drugs While Driving	9.1	12.1
Arrested For Driving Under The Influence Of Drugs	0.0	0.0
Come To Class Or Work After Taking Drugs	12.1	22.7
Missed Class Because Of A Drug Hangover	3.0	6.1
Had Trouble With Law Due To Drugs	0.0	0.0
Lost A Job Because Of Drugs	0.0	0.0
Gotten Into A Fight After Taking Drugs	0.0	1.5
Had Trouble With University Administration Due To Drugs	0.0	0.0
Thought You Might Have A Problem With Drugs	3.0	9.1
Damaged Property After Using Drugs	1.5	1.5

Table 23. Percentage of sophomore population who have used drugs (N=89) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	11.2	16.9
Driven A Car After Using Drugs	21.3	28.1
Taken Drugs While Driving	9.0	16.9
Arrested For Driving Under The Influence Of Drugs	0.0	0.0
Come To Class Or Work After Taking Drugs	12.4	25.8
Missed Class Because Of A Drug Hangover	6.7	12.4
Had Trouble With Law Due To Drugs	1.1	3.4
Lost A Job Because Of Drugs	0.0	0.0
Gotten Into A Fight After Taking Drugs	1.1	3.4
Had Trouble With University Administration Due To Drugs	0.0	0.0
Thought You Might Have A Problem With Drugs	7.9	14.6
Damaged Property After Using Drugs	1.1	2.2

Table 24. Percentage of junior population who have used drugs (N=75) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	8.0	12.0
Driven A Car After Using Drugs	17.3	41.3
Taken Drugs While Driving	12.0	20.0
Arrested For Driving Under The Influence Of Drugs	1.3	1.3
Come To Class Or Work After Taking Drugs	16.0	28.0
Missed Class Because Of A Drug Hangover	4.0	6.7
Had Trouble With Law Due To Drugs	1.3	5.3
Lost A Job Because Of Drugs	1.3	1.3
Gotten Into A Fight After Taking Drugs	1.3	4.0
Had Trouble With University Administration Due To Drugs	0.0	0.0
Thought You Might Have A Problem With Drugs	5.3	14.7
Damaged Property After Using Drugs	1.3	1.3

Table 25. Percentage of senior population who have used drugs (N=107) reporting drug-related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Criticized Because Of Drug Use	9.3	27.1
Driven A Car After Using Drugs	23.4	48.6
Taken Drugs While Driving	17.8	29.9
Arrested For Driving Under The Influence Of Drugs	0.0	0.0
Come To Class Or Work After Taking Drugs	12.1	33.6
Missed Class Because Of A Drug Hangover	7.4	14.0
Had Trouble With Law Due To Drugs	0.0	3.7
Lost A Job Because Of Drugs	0.9	0.9
Gotten Into A Fight After Taking Drugs	0.9	3.7
Had Trouble With University Administration Due To Drugs	0.0	0.9
Thought You Might Have A Problem With Drugs	9.3	18.7
Damaged Property After Using Drugs	0.9	7.5

Table 26. Relationship between level of drug use and socio-demographic and back ground variables for the total university population, in percent.

		Level Of Drug Use					
Socio-demographic or Background Variable	N	Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
SEX*							
Male	502	45.0	24.1	16.5	7.2	5.0	2.2
Female	464	44.8	27.6	18.1	6.7	2.8	0.0
RACE**							
White	789	42.5	26.5	18.5	7.1	4.3	0.9
Non-White	166	57.8	21.7	10.8	5.4	1.8	2.4
RELIGION RAISED IN*							
Roman Catholic	251	50.2	23.9	18.3	4.0	2.8	0.8
Protestant	321	46.4	28.3	13.4	8.4	3.1	0.3
Jewish	183	37.2	24.6	21.3	9.3	5.5	2.2
None	162	37.7	26.5	20.4	7.4	6.2	1.9
IMPORTANCE OF RELIGION**							
Very Important	165	61.8	21.2	9.1	4.2	1.8	1.8
Moderately Important	196	44.4	24.5	19.9	7.1	2.6	1.5
Mildly Important	238	42.9	27.3	18.1	7.1	4.2	0.4
Not Important	361	39.1	27.4	19.1	7.8	5.5	1.1

*p<.05; **p<.01.

Table 27. Relationship between level of drug use and socio-demographic and background variables for undergraduates, in percent.

Socio-demographic or Background Variable	N	Level Of Drug Use Abstain	Infreq.	Light	Moderate	Mod.Heavy/ Heavy
SEX***						
Male	286	35.3	20.6	22.7	10.5	10.8
Female	311	43.1	23.5	22.8	8.0	2.6
RACE**						
White	476	36.1	22.5	25.2	9.7	6.5
Non-White	112	54.5	19.6	13.4	6.3	6.3
COLLEGE CLASS**						
Freshman	152	53.9	16.4	17.8	7.9	3.9
Sophomore	149	33.6	22.1	25.5	12.8	6.0
Junior	127	38.6	21.3	25.2	5.5	9.4
Senior	169	32.0	27.8	23.1	10.1	7.1
RELIGION RAISED IN						
Roman Catholic	144	47.9	18.8	24.3	6.3	2.8
Protestant	161	35.4	26.1	20.5	13.0	5.0
Jewish	139	36.0	20.1	24.5	10.1	9.4
None	125	36.8	22.4	22.4	8.0	10.4
IMPORTANCE OF RELIGION**						
Very Important	101	58.4	17.8	11.9	5.9	5.9
Moderately Important	123	40.7	22.0	26.0	7.3	4.1
Mildly Important	158	37.3	24.1	22.8	10.8	5.1
Not Important	211	31.3	22.7	26.1	10.4	9.5
FRATERNITY/SORORITY MEMBERSHIP*						
Yes	77	24.7	20.8	31.2	10.4	13.0
No	518	41.3	22.4	21.6	9.1	5.6
FORM OF HOUSING***						
On-Campus	408	47.8	21.8	19.6	7.4	3.4
Off-Campus	158	20.9	24.1	27.8	13.3	13.9
Fraternity/ Sorority House	31	22.6	16.1	38.7	12.9	9.7
MAJOR/CONCENTRATION*						
Social Science	140	34.3	26.4	25.7	9.3	4.3
Arts/Humanities	207	32.4	21.3	26.1	11.1	9.2
Science/Engineering	177	52.0	19.2	14.7	8.5	5.6
Other	73	38.4	23.3	27.4	5.5	5.5

Table 27
Continued (P.2)

Socio-demographic or Background Variable	N	Level Of Drug Use Abstain	Infreq.	Light	Moderate	Mod.Heavy/ Heavy
ACADEMIC STANDING						
Good Standing	575	39.7	22.3	22.6	8.9	6.6
Not Good Standing	22	31.8	18.2	27.3	18.2	4.5

*p<.05; **p<.01; ***p<.001.

Table 28. Socio-Demographic and Background Characteristics.

	Faculty And Staff		Graduate Students	
Characteristic	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)
SEX				
Male	152	59.1	65	57.5
Female	105	40.9	48	42.5
RACE/ETHNICITY				
White	237	92.6	77	68.8
Black	9	3.5	3	2.7
Hispanic	4	1.6	5	4.5
Asian American	2	0.8	2	1.8
Foreign	2	0.8	25	22.3
Other	2	0.8	-	-
RELIGION RAISED IN				
Catholic	72	28.2	35	31.5
Protestant (allowing drinking)	110	43.1	33	29.7
Protestant (not allowing drinking)	12	4.7	6	5.4
Jewish	36	14.1	8	7.2
None	17	6.7	20	18.0
IMPORTANCE OF RELIGION				
Very Important	40	15.6	24	21.4
Moderately Important	52	20.3	22	19.6
Mildly Important	58	22.7	22	19.6
Not Important	106	41.4	44	39.3
CONCENTRATION				
Social Science	-	-	22	19.5
Arts/Humanities	-	-	28	24.8
Science/ Engineering	-	-	59	52.2
Other	-	-	4	3.6
YEARS AT UNIVERSITY				
0-1	34	13.2	-	-
2-4	67	26.1	-	-
5-9	57	22.2	-	-
10-14	30	11.7	-	-
15-19	26	10.1	-	-
20 and above	43	16.7	-	-

Table 29. Frequency of use of beer, wine and spirits among the faculty and staff, in percent.

	TYPE OF BEVERAGE		
Frequency Of Use	Beer	Wine	Spirits
Every Day	5.0	10.1	5.0
At Least Once A Week But Not Every Day	25.2	24.0	16.3
At Least Once A Month But Less Than Once A Week	20.5	36.8	24.8
More Than Once A Year But Less Than Once A Month	26.4	19.0	31.8
Once A Year Or Less	7.4	3.1	9.3
Never	15.5	7.0	12.8

Table 30. Frequency of use of beer, wine and spirits among graduate students, in percent.

	TYPE OF BEVERAGE		
Frequency Of Use	Beer	Wine	Spirits
Every Day	3.5	2.7	2.7
At Least Once A Week But Not Every Day	35.4	12.4	8.8
At Least Once A Month But Less Than Once A Week	25.7	49.6	25.7
More Than Once A Year But Less Than Once A Month	20.4	22.1	33.6
Once A Year Or Less	5.3	3.5	10.6
Never	9.7	9.7	18.6

Table 31. Percentages of faculty and staff in Q-F levels, by type of beverage and overall.

	TYPE OF BEVERAGE			
Q-F Level	Beer	Wine	Spirits	Overall
Abstainers	22.9	10.1	22.1	3.9
Infrequent Drinkers	26.4	19.0	31.8	11.6
Light Drinkers	18.6	31.0	22.1	20.2
Moderate Drinkers	29.8	31.4	22.1	52.7
Moderately-Heavy Drinkers	1.2	8.5	1.9	10.5
Heavy Drinkers	1.2	0.0	0.0	1.2

Table 32. Percentages of graduate students in Q-F levels, by type of beverage and overall.

	TYPE OF BEVERAGE			
Q-F Level	Beer	Wine	Spirits	Overall
Abstainers	15.0	13.3	29.2	6.2
Infrequent Drinkers	20.4	22.1	33.6	11.5
Light Drinkers	19.5	42.5	23.0	25.7
Moderate Drinkers	33.6	18.6	13.3	42.5
Moderately-Heavy Drinkers	9.7	2.7	0.9	11.5
Heavy Drinkers	1.8	0.9	0.0	2.7

Table 33. Percentage of faculty and staff who drink (N=245) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	33.1	82.2
Nausea And Vomiting	8.2	63.7
Driven After Having Several Drinks	26.5	70.1
Driven After Knowing Had Too Much To Drink	7.3	55.5
Drinking While Driving	4.9	24.5
Arrested For DWI	0.0	0.8
Came To Class After Drinking	0.8	7.8
Missed Class Because Of Hangover	0.8	9.0
Criticized Because Of Drinking	2.9	16.4
Had Trouble With Law Because of Drinking	0.0	4.2
Lost Job Because Of Alcohol	0.0	0.0
Trouble With University Administration Due To Drinking	0.0	0.8
Gotten Into A Fight After Drinking	1.2	11.4
Thought You Might Have A Problem With Drinking	5.3	16.3
Damaged Property After Drinking	0.4	6.1
Were Sexually Active When Otherwise Might Not Have Been	5.7	40.4
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	2.9	19.7

Table 34. Percentage of graduate students who drink (N=106) reporting alcohol-related problems at least once in past year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Hangover	48.0	79.4
Nausea And Vomiting	14.2	65.1
Driven After Having Several Drinks	23.4	60.1
Driven After Knowing Had Too Much To Drink	7.6	41.0
Drinking While Driving	5.6	17.9
Arrested For DWI	0.0	0.0
Came To Class After Drinking	1.9	12.3
Missed Class Because Of Hangover	5.7	22.6
Criticized Because Of Drinking	4.7	10.4
Had Trouble With Law Because of Drinking	0.0	2.8
Lost Job Because Of Alcohol	0.0	0.0
Trouble With University Administration Due To Drinking	0.0	0.0
Gotten Into A Fight After Drinking	0.0	1.9
Thought You Might Have A Problem With Drinking	8.5	17.9
Damaged Property After Drinking	0.9	6.6
Were Sexually Active When Otherwise Might Not Have Been	9.4	35.8
Engaged In Unprotected Intercourse When You Might Otherwise Not Have	3.8	19.8

Table 35. Relationship between alcohol Q-F level and socio-demographic and background variables for faculty and staff, in percent.

		Q-F Level			
Socio-demographic or Background Variable	N	Abstain/ Infreq.	Light	Moderate	Mod.Heavy/ Heavy
SEX**					
Male	151	13.2	13.2	62.3	11.3
Female	105	18.1	30.5	40.0	11.4
RACE*					
White	236	13.6	21.2	53.8	11.4
Non-White	19	36.8	10.5	42.1	10.5
RELIGION RAISED IN+					
Roman Catholic	72	15.3	13.9	54.2	16.7
Protestant	121	14.9	23.1	51.2	10.7
Jewish	36	11.1	25.0	58.3	5.6
None	17	23.5	11.8	52.9	11.8
IMPORTANCE OF RELIGION+					
Very Important	40	22.5	10.0	47.5	20.0
Moderately Important	51	15.7	35.3	43.1	5.9
Mildly Important	58	12.1	17.2	56.9	13.8
Not Important	106	14.2	18.9	56.6	10.4

+p<.10; *p<.05; **p<.01.

Table 36. Relationship between alcohol Q-F level and socio-demographic and background variables for graduate students, in percent.

		Q-F Level			
Socio-demographic or Background Variable	N	Abstain/ Infreq.	Light	Moderate	Mod.Heavy/ Heavy
SEX					
Male	65	12.3	23.1	46.2	18.5
Female	48	25.0	29.2	37.5	8.3
RACE*					
White	77	10.4	29.9	45.5	14.3
Non-White	35	31.4	17.1	37.1	14.3
RELIGION RAISED IN					
Roman Catholic	35	20.0	5.7	54.3	20.0
Protestant	39	12.8	35.9	43.6	7.7
Jewish	8	25.0	37.5	37.5	0.0
None	20	25.0	25.0	30.0	20.0
IMPORTANCE OF RELIGION					
Very Important	24	20.8	33.3	45.8	0.0
Moderately Important	22	22.7	22.7	45.5	9.1
Mildly Important	22	9.1	22.7	45.5	22.7
Not Important	44	15.9	25.0	38.6	20.5

*p<.05

Table 37. Frequency of drug use for faculty and staff, in percent.

	TYPE OF DRUG			
Frequency Of Use	Cocaine	Marijuana	Other	Overall
Every Day	0.0	0.4	0.0	0.4
At Least Once A Week But Not Every Day	0.0	1.6	0.0	1.6
At Least Once A Month But Less Than Once A Week	0.0	2.3	1.5	3.9
More Than Once A Year But Less Than Once A Month	1.9	4.7	3.1	7.0
Once A Year Or Less	6.2	30.6	8.1	29.8
Never	91.9	60.5	87.3	57.4

Table 38. Frequency of drug use for graduate students,in percent.

	TYPE OF DRUG			
Frequency Of Use	Cocaine	Marijuana	Other	Overall
Every Day	0.0	0.9	0.0	0.9
At Least Once A Week But Not Every Day	0.0	3.5	0.0	3.5
At Least Once A Month But Less Than Once A Week	0.9	1.8	0.0	1.8
More Than Once A Year But Less Than Once A Month	4.4	9.7	0.9	11.5
Once A Year Or Less	17.7	36.3	17.7	35.4
Never	77.0	47.8	81.4	46.9

Table 39. Percentage of faculty and staff who have used drugs (N=105) reporting drug related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Critized Because Of Drug Use	2.9	12.4
Driven A Car After Using Drugs	7.6	38.1
Taken Drugs While Driving	4.8	18.1
Arrested For Driving Under The Influence Of Drugs	0.0	0.0
Come To Class Or Work After Taking Drugs	1.9	14.3
Missed Class Because Of A Drug Hangover	0.0	7.6
Had Trouble With Law Due To Drugs	0.0	0.0
Lost A Job Because Of Drugs	0.0	0.0
Gotten Into A Fight After Taking Drugs	0.0	0.0
Had Trouble With University Administration Due To Drugs	0.0	0.0
Thought You Might Have A Problem With Drugs	0.1	4.8
Damaged Property After Using Drugs	0.0	0.1

Table 40. Percentage of graduate students who have used drugs (N=53) reporting drug related problems at least once in the last year and in lifetime.

Type Of Problem	PAST YEAR	LIFETIME
Critized Because Of Drug Use	3.8	18.9
Driven A Car After Using Drugs	11.3	49.1
Taken Drugs While Driving	11.3	30.2
Arrested For Driving Under The Influence Of Drugs	0.0	1.9
Come To Class Or Work After Taking Drugs	9.4	24.5
Missed Class Because Of A Drug Hangover	0.0	5.7
Had Trouble With Law Due To Drugs	0.0	5.7
Lost A Job Because Of Drugs	0.0	0.0
Gotten Into A Fight After Taking Drugs	0.0	0.0
Had Trouble With University Administration Due To Drugs	0.0	0.0
Thought You Might Have A Problem With Drugs	1.9	13.2
Damaged Property After Using Drugs	0.0	1.9

Table 41. Relationship between level of drug use and socio-demographic background variables for faculty and staff, in percent.

Socio-demographic or Background Variable	N	Abstain	Infreq.	Light	Moderate	Mod.Heavy/ Heavy
		Level Of Drug Use				
SEX						
Male	151	62.3	27.2	6.6	2.6	1.3
Female	105	49.5	34.3	7.6	5.7	2.9
RACE						
White	236	57.2	29.7	7.6	3.4	2.1
Non-White	19	57.9	31.6	0.0	10.5	0.0
RELIGION RAISED IN						
Roman Catholic	72	56.9	27.8	11.1	1.4	2.8
Protestant	121	61.2	27.3	5.8	4.1	1.7
Jewish	36	47.2	38.9	5.6	5.6	2.8
None	17	29.4	52.9	5.9	11.8	0.0
IMPORTANCE OF RELIGION						
Very/Moderately Important	91	61.5	23.1	8.8	6.6	0.0
Mildly/Not Important	164	54.9	33.5	6.1	2.4	3.0

Table 42. Relationship between level of drug use and socio-demographic a background variables for graduate students, in percent.

Socio-demographic or Background Variable	N	Level Of Drug Use Abstain	Infreq.	Light	Moderate	Mod.Heavy Heavy
SEX						
Male	65	47.7	32.3	12.3	3.1	4.6
Female	48	45.8	39.6	10.4	0.0	4.2
RACE*						
White	77	36.4	41.6	13.0	2.6	6.5
Non-White	35	68.6	22.9	8.6	0.0	0.0
RELIGION RAISED IN						
Roman Catholic	35	45.7	37.1	8.6	0.0	8.6
Protestant	39	46.2	41.0	7.7	2.6	2.6
Jewish	8	12.5	37.5	37.5	12.5	0.0
None	20	50.0	30.0	20.0	0.0	0.0
IMPORTANCE OF RELIGION						
Very/Moderately Important	46	52.2	37.0	4.3	0.0	6.5
Mildly/Not Important	66	42.4	34.8	16.7	3.0	3.0

*p<.05

Table 43. Correlation of levels of alcohol and other drug use with various socio-demographic, personal background and environmental factors. (a)

Type Of Factor	Q-F Level For Alcohol Use				Level Of Drug Use			
	Under-graduates	Graduates	Faculty/ Staff	Total University	Under-graduates	Graduates	Faculty/ Staff	Total University
SOCIO-DEMOGRAPHIC STATUS								
Sex (b) (Male=1, Female=0)	.20***	.24**	.14*	.18***	.16***	.04	-.13*	.06*
Race (b) (White=1, Non-White=0)	.19***	.11	.12*	.17***	.12**	.28**	.00	.09**
Religion Raised In (b) (Catholic=1, Non-Catholic=0)	.06	.14	.08	.07*	-.11**	.05	.00	-.07*
Marital Status (b) (Married=0, Single, Divorced, Seperated=1)	-	-.13	-.02	-	-	.07	.21**	-
Age	.00	-.08	.11*	-	.11**	-.18*	-.31***	-
PERSONAL BACKGROUND								
Importance Of Religion	-.15***	-.18*	-.04	-.13***	-.16***	-.14	-.06	-.13***
Year In School	-.04	-	-	-	.11**	-	-	-
Good Academic Standing (b) (Good Standing=1 Not Good Standing=0)	-.06	-	-	-	-.03	-	-	-
Fraternity/Sorority (b) Membership (Membership=1)	.20***	-	-	-	.15***	-	-	-
Living In A Fraternity/ Sorority House (b) (Residence=1)	.19***	-	-	-	.09*	-	-	-
Overall Knowledge Of Alcohol	.19***	.26**	.01	.17***	.16***	.23*	.07	.18***
General Knowledge								
English SAT Score	-.07	-	-	-	.12**	-	-	-
Math SAT Score	.06	-	-	-	.02	-	-	-
Personal Happiness	.08	-.13	-.03	.03	-.08	-.07	-.16**	-.10**
Motivation To Use Alcohol Or Drugs								
To Forget Worries	.35***	.27**	.24***	.33***	.29***	.24**	.23***	.30***
When Under Pressure	.28***	.27**	.30***	.27***	.26***	.31**	.25***	.23***
When Feeling Lonely	.24***	.16	.24***	.23***	.26***	.16	.04	.22***
Nothing Else To Do	.38***	.34***	.13*	.35***	.33***	.27**	.13*	.35***
Polite Thing To Do	.12**	.26**	.15**	.14***	.03	-.12	-.05	-.01
To Cheer Up	.42***	.39***	.21**	.38***	.29***	.21*	.19**	.28***
Level of Alcohol Use	-	-	-	-	.45***	.28*	.03	.37***

Table 43
Continued (P.2)

	Q-F Level For Alcohol Use				Level Of Drug Use			
Type of Factor	Undergraduates	Graduates	Faculty/ Staff	Total University	Undergraduates	Graduates	Faculty/ Staff	Total University
ENVIRONMENTAL CONDITIONS								
Peer Pressure:								
Alcohol Use Of Acquaintances	.51***	.44***	.32***	.45***	.26***	.13	.21**	.28***
Alcohol Use Of Close Friends	.62***	.58***	.26***	.55***	.37***	.14	.24***	.34***
Negative Reaction Of Close Friends On Campus To Intoxication	-.30***	-.34***	-.09	-.25***	-.13**	-.05	-.16**	-.20***
Emphasis On Drinking At Parties	.06	-.03	.01	-.03	.00	.01	.10	.06*
Availability Of Alcohol On Campus:								
Under Age 21	.05	-	-	-	.06	-	-	-
Age 21 and Over	-.03	-	-	-	-.04	-	-	-
Overall	.02	-.14	-	.02	.04	.16	-	.13***
Availability of Drugs on Campus:	-.07	-.11	-.08	-.07	-.14**	-.07	.24*	.10*

(a) Correlations computed as Pearson's r.
(b) Measures scored as dummy variables, as shown.

*p<.05; **p<.01; ***p<.001.

Table 44. Availability of drugs by level of drug use among undergraduates, in percent.

		Level Of Drug Use					
Drug Availability+	N	Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
Fairly Or Very Easy To Obtain	372	88.7	79.4	78.4	76.5	70.0	88.9
Somewhat Or Very Difficult To Obtain	86	11.3	20.6	21.6	23.5	30.0	11.1

+p<.10

Table 45. Awareness and satisfaction with alcohol and drug treatment services, in percent.

Treatment Issue	Under-graduates	Graduate Students	Faculty/ Staff	Overall University
AWARENESS OF WHERE TO OBTAIN TREATMENT SERVICES				
Very Aware	18.4	6.3	32.3	20.7
Moderately Aware	27.4	12.6	18.1	23.3
Somewhat Aware	44.3	42.3	28.7	39.9
Not Aware	9.9	38.7	20.9	16.1
SATISFACTION WITH TREATMENT SERVICES (N)	(15)	(1)	(10)	(26)
Very Pleased	6.6	0.0	90.0	42.3
Somewhat Pleased	26.7	0.0	10.0	19.2
Not Particularly Pleased	40.0	0.0	0.0	23.1
Very Displeased	26.7	100.0	0.0	15.4

Table 46. Awareness and opinion of alcohol and drug information services on campus, in percent.

Information Service Issue	Under-graduates	Graduate Students	Faculty/ Staff	Overall University
AWARENESS OF WHERE TO OBTAIN INFORMATIONAL SERVICES				
Very Aware	21.6	5.5	32.7	22.7
Moderately Aware	29.8	15.5	17.3	24.9
Somewhat Aware	41.0	45.5	29.9	38.5
Not Aware	7.7	33.6	20.1	13.9
AWARENESS OF EXISTENCE OF INFORMATIONAL PROGRAMS				
Does the university have a special program?:				
Yes, A Very Extensive One	11.2	3.6	22.6	13.4
Yes, A Moderately Extensive One	50.0	21.3	36.1	43.0
Yes, But Not Very Extensive	21.9	15.7	13.1	18.9
Yes, But Quite Limited	2.7	6.5	4.0	3.5
Yes, But Extent Unknown	1.4	0.9	2.0	1.5
Not That I'm Aware Of	12.8	51.9	22.2	19.7
RECEIPT OF INFORMATION (OUTSIDE CLASS)				
Yes, A Number Of Times	21.8	3.8	17.3	18.6
Yes, A Couple Of Times	47.3	19.8	26.6	38.9
Yes, But Only Once	11.8	7.5	5.5	9.7
No, Never	19.1	68.9	50.6	32.8
OPINION OF INFORMATION RECEIVED (N)	(465)	(32)	(101)	(598)
Excellent	11.4	6.3	17.8	12.2
Very Good	41.7	31.2	47.5	42.1
Fair	41.9	50.0	31.7	40.6
Not Particularly Good	3.9	12.5	3.0	4.2
Poor	1.1	0.0	0.0	0.8

Table 47. Extensiveness and quality of undergraduate alcohol and drug educational instruction on campus, in percent.

NUMBER OF CLASSES ALCOHOL AND/OR DRUGS USE/ABUSE HAVE BEEN RAISED IN	Percent
Number Of Classes	0.8
Couple Of Classes	8.5
Only One Class	14.0
No Classes	76.5
QUALITY OF EDUCATIONAL INSTRUCTION RECEIVED (N)	(136)
Excellent	8.1
Very Good	25.0
Fair	45.6
Not Particularly Good	14.7
Poor	6.6

Table 48. Correlation (a) between five measures of awareness and receipt of substance use and abuse services on campus and eleven measures of those disproportionately involved with alcohol and drug use and abuse. (b)

Type Of Service	Alcohol (Q-F) Use Level	Number Of Alcohol Problems (Past Year)	Level Of Drug Use	Number Of Drug Problems (Past Year)	Males	Whites	Catholics	Frater-nity/ Sorority Members	Fraternity/ Sorority House Residents	Class Year	Alcohol Use Level Of Close Friends
TREATMENT SERVICES											
A. Awareness Of Where To Obtain Treatment Services											
Undergraduates	.02	.07*	.06	.02	.01	-.03	-.04	.06	.04	.11**	.03
Graduate Students	.16*	.00	.07	-.02	.05	.19*	.00	-	-	-	.06
Faculty/Staff	.16**	.15**	-.07	.05	.07	.02	.06	-	-	-	.16**
INFORMATION SERVICES											
B. Awareness Of Where To Obtain Informational Services											
Undergraduates	.04	.08*	.06	.05	.02	-.03	-.05	.02	.03	.12**	.02
Graduate Students	.19*	-.02	.01	-.04	.06	.18*	.05	-	-	-	.06
Faculty/Staff	.17**	.13*	-.08	.04	.07	.06	.03	-	-	-	.14*
C. Awareness Of Existence Of Informational Programs											
Undergraduates	.10**	-.01	.01	-.10**	-.05	.08*	-.03	.05	.02	.08*	.04
Graduate Students	.22*	.10	.14	.06	.01	.14	.08	-	-	-	.11
Faculty/Staff	.16**	.02	-.09	.01	.05	.06	-.06	-	-	-	.13*
D. Receipt Of Information (Outside Class)											
Undergraduates	.00	.03	-.02	.04	.04	.04	.00	.05	.03	.03	-.01
Graduate Students	.17*	.16	.13	.08	.15	.24**	.07	-	-	-	.14
Faculty/Staff	.03	.10	-.08	-.04	.00	.10	.04	-	-	-	.24***
EDUCATIONAL SERVICES											
E. Number Of Classes Alcohol And/Or Drug Use/Abuse Have Been Raised In											
Undergraduates	.00	.04	.08*	.07	.01	-.06	.01	.14***	.15***	.04	-.01
Graduate Students	.10	.06	-.01	.06	.21*	.12	.01	-	-	-	-.11
Faculty/Staff	-	-	-	-	-	-	-	-	-	-	-

(a) Measured as Pearson's r.

(b) The following variables are scored as dummy variables: males, whites, Catholics and fraternity/sorority membership and residency.

* p<.05; ** p<.01; *** p<.001.

Table 49. Percentages of undergraduates in alcohol Q-F levels at The University, in comparison with schools in the Northeast and in the United States as a whole. (a)

	Q-F Level					
Type Of Student	Abstain	Infreq.	Light	Moderate	Moderate-Heavy	Heavy
ALL UNDERGRADUATES						
The University	7.2	12.9	21.7	27.3	22.9	8.0
Overall Northeast	15.1	8.2	11.0	18.2	25.6	21.9
United States	18.0	8.8	11.7	18.4	22.2	21.1
MALES						
The University	7.3	10.5	15.0	24.4	29.6	13.2
Overall Northeast	11.0	7.7	5.1	12.8	26.8	36.7
United States	13.4	-	-	-	-	38.2
FEMALES						
The University	7.1	15.1	28.0	29.9	16.7	3.2
Overall Northeast	17.1	8.4	13.8	20.5	25.2	15.1
United States	20.9	-	-	-	-	17.1
FRESHMEN						
The University	10.5	16.3	15.0	20.9	23.5	13.7
Overall Northeast	20.4	5.5	11.0	13.9	21.4	27.8
United States	22.9	-	-	-	-	29.0
SOPHOMORES						
The University	6.7	8.1	23.5	26.2	26.2	9.4
Overall Northeast	13.9	9.8	10.7	18.1	24.9	22.6
United States	18.1	-	-	-	-	31.1
JUNIORS						
The University	7.1	15.7	21.3	29.9	21.3	4.7
Overall Northeast	13.3	8.9	8.9	19.6	26.7	22.6
United States	16.2	-	-	-	-	23.7
SENIORS						
The University	4.7	11.8	26.6	32.0	20.7	4.1
Overall Northeast	11.4	8.8	12.1	20.5	31.6	15.5
United States	12.7	-	-	-	-	16.6
ROMAN CATHOLICS						
The University	6.9	13.2	17.4	25.7	23.6	13.2
Overall Northeast	10.9	7.1	10.7	17.8	27.7	25.8
United States	10.2	-	-	-	-	30.9

(a) National data derived from Engs and Hanson, 1985a. Overall Northeast data obtained from Ruth Engs, School of Health, Physical Education and Recreation, Indiana University. National and Overall Northeast data are for 1985, The University data for 1986.

Table 50. Percentage of undergraduates who drink reporting alcohol-related problems at least once in the past year and lifetime at the University, in the Northeast and in the United States as a whole. (a)

	Past Year		Lifetime		
Type Of Problem	The University	Overall Northeast	The University	Overall Northeast	United States
Hangover	57.5	74.4	73.8	86.4	62.7
Nausea And Vomiting	29.6	48.0	65.1	80.9	40.2
Driven After Having Several Drinks	21.7	49.1	47.5	68.9	46.8
Driven After Knowing Had Too Much To Drink	11.0	32.4	34.8	56.3	32.1
Drinking While Driving	10.3	36.6	24.0	39.3	34.6
Arrested For DWI	0.6	0.6	0.8	1.8	1.0
Came To Class After Drinking	6.3	8.1	19.5	22.2	7.3
Missed Class Because Of Hangover	14.5	27.6	24.3	40.4	22.5
Criticized Because Of Drinking	6.3	12.2	12.3	22.0	9.3
Had Trouble With Law Because Of Drinking	3.0	2.7	6.1	9.4	3.4
Lost Job Because Of Alcohol	0.4	0.4	0.6	0.6	0.3
Trouble With University Administration Due To Drinking	1.1	2.5	2.3	5.0	1.4
Gotten Into A Fight After Drinking	3.0	12.3	9.1	24.5	10.6
Thought You Might Have A Problem With Drinking	7.2	7.3	16.5	16.4	7.2
Damaged Property After Drinking	4.7	10.1	11.2	20.6	8.0
Were Sexually Active When Otherwise Might Not Have Been (b)	24.4	-	46.5	-	-
Engaged In Unprotected Intercourse When You Might Otherwise Not Have (b)	8.9	-	21.2	-	-

(a) National data derived from Engs and Hanson, 1985a. Overall northeast data obtained from Ruth Engs, School of Health, Physical Education and Recreation, Indiana University. National and Overall Northeast data are for 1985, The University data for 1986.

(b) Comparable data are not available for the Overall Northeast or United States.

THE UNIVERSITY ALCOHOL AND DRUG QUESTIONNAIRE

With the aid of the enclosed questionnaire, we hope to learn more about the needs of our alcohol and drug related services here at the University. We ask that you take 20 minutes to carefully complete the questions below and then mail your survey to Integrated Research Services, Inc. by April 10, 1986.

We are grateful for your participation in this study. Your answers are strictly confidential. We have taken extensive measures to guarantee respondent anonymity and for that reason we ask you not to write your name on any part of the questionnaire.

Thanks again for your help. If you have any questions, please feel free to call Integrated Research Services, Inc., (503) 683-9278.

FILL IN THE NUMBER WHICH APPLIES TO YOU IN THE SPACE BESIDE THE QUESTION

A. BACKGROUND

1. Your sex: 1. Male 2. Female ____

2. Your age (write in) ____

3. Marital status:
1. Single 2.Married 3.Separated 4.Divorced
5. Widow/Widower 6. Single, but living with mate ____

Students Only (Others Skip to Q.9)

4. Your concentration:
1. Social science 2. Arts/Humanities 3. Science
4. Engineering 5. Independent 6. Other ________ (write in) ____

5. Year in School:
1. Freshman 2. Sophomore 3. Junior 4. Senior 5. Graduate ____
6. Other ____________ (write in)

6. Do you live:
1. In campus housing 2. In an off-campus apartment
3. In a residential fraternity or sorority house
4. With your parents ____

7. Are you a fraternity or sorority member? 1. Yes 2. No ____

8. Are you in good academic standing? 1. Yes 2. No ____

Faculty and Staff Only (Others Skip to Section B)

9. Job Title:
1. Professor 2. Instructor 3. Clerical/administrative
4. Other ________ (write in) ____

10. How many years have you been employed at the University?(write in) ____

Adapted from R. Engs Student Alcoholic Questionnaire: ©Ruth C. Engs, HPER, Indiana University, Bloomington, IN 47405, 1975
©Steven A. Bloch and Steven Ungerleider, Integrated Research Services, Irvine, CA, March, 1986 as adapted from Engs' S.A.Q.

WE WOULD LIKE TO ASK YOU ABOUT YOUR PATTERNS OF DRINKING AND USING DRUGS

1. Let's first take beer. How often, on the average, do you usually have a beer? (If you do not drink beer at all, place a "0" in the space provided and go to question 3) ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

2. When you drink beer, how much, on the average do you usually drink at any one time? ____
   1. more than 1 six pack (6 or more cans or tavern glasses
   2. 5 or 6 cans of beer or tavern glasses
   3. 3 or 4 cans of beer or tavern glasses
   4. 1 or 2 cans of beer or tavern glasses
   5. less than 1 can of beer or tavern glass

3. Now let's look at table wine.(If you do not drink wine at all, place a "0" in the space provided and go to question 5.) How often do you usually drink wine? ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

4. When you drink wine how much, on the average, do you usually drink at any one time? ____
   1. over 6 wine glasses
   2. 5 or 6 wine glasses
   3. 3 or 4 wine glasses
   4. 1 or 2 wine glasses
   5. less than 1 glass of wine

5. Next we would like to ask you about liquor or spirits, (whiskey, gin, vodka, mixed drinks, etc.). (If you do not drink liquor at all, place a "0" in the space provided and go to question 7.)How often do you usually have a drink of liquor? ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

6. When you drink liquor how many drinks, on the average, do you usually drink at any one time? ____
   1. over 6 drinks
   2. 5 or 6 drinks
   3. 3 or 4 drinks
   4. 1 or 2 drinks
   5. less than 1 drink

7. We would also like to ask you about marijuana and hash. (If you've never tried marijuana or hash place a "0" in the space provided and skip to question 8.) How often do you usually smoke marijuana or hash? ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

8. We would now like to ask you about cocaine. (If you've never used cocaine, place a "0" in the space provided and skip to question 9.) How often do you usually use cocaine? ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

9. Finally, we would like to ask you about your use of other drugs (psychedelics, ecstasy, amphetamines, tranquilizers, etc.). (If you've never taken other drugs, place a "0" in the space provided and skip to Section C.) How often do you usually use other drugs? ____
   1. every day
   2. at least once a week but not every day
   3. at least once a month but less than once a week
   4. more than once a year but less than once a month
   5. once a year or less

10. The following is a list of reasons why people drink or take drugs. Do you drink or take drugs for any of the following reasons?
    Mark a "3" if you do so frequently
    Mark a "2" if you do so sometimes
    Mark a "1" if you do so rarely
    Mark a "0" if you do not do so.

_____1. To forget worries
_____2. When under pressure
_____3. When feeling lonely
_____4. Nothing else to do
_____5. Because it's the polite thing to do in certain situations
_____6. To cheer up when in a bad mood

C. WE WOULD NOW LIKE TO ASK YOU A FEW QUESTIONS ABOUT ALCOHOL USE ON CAMPUS.

1. As a whole, the people I am acquainted with use alcohol: ____
   1. to a great degree (e.g. several times a week, five or more drinks per time)
   2. to a moderately great degree (e.g. once or twice a week, three or four drinks per time)
   3. to a moderate degree (e.g. two or three times per month, one to three drinks per time)
   4. to a modest degree (e.g. once a month, one or two drinks per time)
   5. not at all, or almost not at all

2. As a whole, my closest friends on campus use alcohol: ____
   1. to a great degree (e.g. several times a week, five or more drinks per time)
   2. to a moderately great degree (e.g. once or twice a week, three or four drinks per time)
   3. to a moderate degree (e.g. two or three times per month, one to three drinks per time)
   4. to a modest degree (e.g. once a month, one or two drinks per time)
   5. not at all, or almost not at all

3. If you got very drunk one night while out with your closest friends on campus, they would probably: ____
   1. think it was real cool or funny
   2. think it was fairly cool or funny
   3. not react too strongly one way or another
   4. be a little disapproving or irritated
   5. be strongly disapproving or irritated

4. How strong do you feel the emphasis is with respect to drinking at social get-togethers and parties at the University? ____
   1. very strong (frequently heavy drinking is necessary to get by socially)
   2. moderately strong (you feel obligated to drink, sometimes heavily)
   3. not too strong, but it does exist (people expect you to drink, but you don't have to)
   4. quite mild or non-existent (many people don't drink)

5. If you wished to obtain drugs other than alcohol (e.g. marijuana) on campus, or in dorms, fraternities or sororities, how difficult would it be? ____
   1. very easy
   2. fairly easy
   3. somewhat difficult, but it can be done
   4. quite difficult
   5. don't know

6. (Students only) If you got together with friends to drink on campus, in dorms, fraternities or sororities, how difficult would it be to go about getting something to drink (beer, wine, etc.)? ____
   1. very easy
   2. fairly easy
   3. somewhat difficult, but it can be done
   4. quite difficult
   5. don't know

D. The following are common results of drinking that people like yourself have reported. (If you have never had a drink at all go to Section E.) If you currently drink or have drunk in the past, put the number corresponding to the frequency of the occurrence in the space beside it.

1. at least once during the past two months and at least one additional time during the past year.
2. at least once within the past two months but not during the rest of this past year.
3. not during the past two months but at least once during the past year.
4. has happened at least once in my life but not during the past year.
5. has not happened to me.

_____1. have had a hangover
_____2. gotten nauseated and vomited from drinking
_____3. driven a car after having several drinks
_____4. driven a car when you know you have had too much to drink
_____5. driving while driving a car
_____6. arrested for DWI (Driving While Intoxicated)
_____7. have come to class or work because of a hangover
_____8. missed a class or work after having several drinks
_____9. been criticized by someone you were seeing or your spouse because of your drinking
____10. had trouble with the law because of drinking
____11. lost a job because of drinking
____12. gotten into trouble with the University administration because of behavior resulting from drinking too much
____13. gotten into a fight after drinking
____14. thought you might have a problem with your drinking
____15. damaged property, pulled a false fire alarm, or other such behavior after drinking
____16. were sexually active when you might otherwise not have been
____17. engaged in unprotected intercourse you might otherwise not have

E. The following are common results of using drugs (other than alcohol) that people like yourself have reported. If you've ever used prescription or non-prescription drugs for recreational purposes, put the number corresponding to the frequency of the occurrences in the space beside it.(Others skip to Section G.)

1. at least once during the past two months and at least one additional time during the past year.
2. at least once within the past two months but not during the rest of this past year.
3. not during the past two months but at least once during the past year.
4. has happened at least once in my life but not during the past year.
5. has not happened to me.

F. WE WOULD LIKE TO ASK YOU SOME INFORMATION ABOUT ALCOHOL

The questions will either be TRUE or FALSE. If you do not know the answer to the question, DO NOT GUESS. Mark a "0" in the space provided.
If you think the answer is TRUE, write "1" for true.
If you think the answer is FALSE, write "2" for false.
If you do not know the answer write "0" in the space provided.

_____1. Alcohol is usually classified as a stimulant.
_____2. Approximately 10% of fatal highway accidents are alcohol related.
_____3. A blood alcohol concentration of 0.1% is the legal definition of alcohol intoxication in most states in regards to driving.
_____4. It is estimated that approximately 85% of the adult Americans who drink misuse or abuse alcoholic beverages.
_____5. Liquor taken straight will affect you faster than liquor mixed with water.
_____6. The most commonly drunk alcoholic beverage in the United States is distilled liquor (whiskey, gin, vodka).
_____7. Eating while drinking will have no effect on slowing down the absorption of alcohol in the body.
_____8. It takes about as many hours as the number of beers drunk to completely burn up the alcohol ingested.
_____9. Proof on a bottle of liquor represents half the percent of alcohol contained in the bottle.
____10. Drinking coffee or taking a cold shower can be an effective way of sobering up.

G. WE WOULD NOW LIKE TO ASK YOU ABOUT ALCOHOL-RELATED SERVICES AT THE UNIVERSITY.

1. If you had a problem with alcohol or drugs, would you know precisely where at the University to go for help? ____
   1. yes, I am well aware of the availability of existing services and programs
   2. yes, I have a general knowledge of existing programs and services
   3. yes, I have some idea of where to go at least to start looking
   4. no, I really don't know where existing programs and services are located

2. If you wished to find out more about alcohol and drug use and abuse, would you know just where to go on campus for information? ____
   1. yes, I am well aware of the availability of existing services and programs
   2. yes, I have a general knowledge of existing programs and services
   3. yes, I have some idea of where to go at least to start looking
   4. no, I really don't know where existing programs and services are located

3. As far as you know, does the University have a special program (or programs) designed to inform people about alcohol and drug use and abuse? ____
   1. yes, a very extensive one
   2. yes, a moderately extensive one
   3. yes, but it's not very extensive
   4. yes, but it is quite limited
   5. not that I'm aware of

4. If you've ever used any of the alcohol or drug treatment services on campus, would you say as a whole you were: (Mark "0" if you've never used any services.)
   1. very pleased with the quality of treatment services ____
   2. somewhat pleased with the quality of treatment services
   3. not particularly pleased with the quality of treatment services
   4. very displeased with the quality of treatment services

5. (Students Only) Has the subject of alcohol and/or drug use and abuse ever been raised as part of formal instruction by an instructor in any of the courses you've taken on campus? ____
   1. yes, in a number of classes
   2. yes, in a couple of classes
   3. yes, but only in one class
   4. no, it was never specifically dealt with (skip to question 7)

6. (Students Only) Overall, what do you think of the alcohol and drug use/abuse education you've received in class at the University? ____
   1. excellent
   2. very good
   3. fair
   4. not particularly good
   5. poor

7. Have you ever received any information (outside class) specifically about alcohol and drug use or abuse while at the University? ____
   1. yes, a number of times
   2. yes, a couple of times
   3. yes, but only once
   4. no, I have never received information specifically about the subject (skip to Section H)

8. Overall, what do you think of the information you have received (outside class?)
   1. excellent ____
   2. very good
   3. fair
   4. not particularly good
   5. poor

H. LASTLY, WE WOULD LIKE TO ASK YOU A FEW MORE QUESTIONS ABOUT YOURSELF

1. Would you say that your life during the past year has been
   1. Happy
   2. Moderately happy with ups and downs
   3. Frequently unhappy but with some up periods
   4. Unhappy with frequent upsets

2. What is your ethnicity?
   1. White/Caucasian 2. Black/Afro-American 3. Hispanic/Latino ____
   4. Asian American 5. Foreign Student 6. Other ____________ (write in)

3. What religion were you brought up in?
   1. Roman Catholic 2. Protestant (religion allows drinking of alcoholic beverages)
   3. Protestant (religion does not allow drinking) 4. Jewish
   5. None 6. Other ______________
   (write in)

4. How important is religion to me:
   1. Very important 2. Moderately important 3. Mildly important
   4. Not important

Students Only (Others Skip to End)

5. What is your student status?
   1. Full-time student 2. Part-time student
   3. Resuming undergraduate education (RUE)

6. What were your scores on the SAT? 1. English
   2. Mathematics

Thank you again for your assistance with our project and for returning the questionnaire by April 10 to:

Dr. Steven Ungerleider
Integrated Research Services, Inc.
66 Club Road, Suite 370
Eugene, Oregon 97401

Integrated Research Services, Inc. is a non-profit research and education corporation that specializes in the development and evaluation of substance abuse, chemical dependency, and addiction programs nationwide.

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